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THE DEPTHS OF THE SEA.*

THE results of the Deep-Sea explorations recently carried out by Dr. Car-

penter, Mr. J. Gwyn Jeffreys, and Professor Wyville Thomson have excited so much interest, not only among men of science, but also among the general public—and this not less in other countries than in our own—that we feel sure of our readers' welcome to an endeavor to place before them a general account of the most important of them; chiefly directing their attention to those new ideas which these researches have introduced into science, since without such any mere accumulation of facts remains a *rudis indigestaque moles*, not animated and quickened by any vital force. On two of these ideas we shall especially dwell—viz., the doctrine advocated by Dr. Carpenter, of a General Oceanic Circulation sustained by Thermal agency alone, characterized by Sir Roderick Murchison* as one, which, 'if borne out by experiment,' would 'rank amongst the discoveries in physical geography, on a

* (1.) *The Depths of the Sea*. An Account of the General Results of the Dredging Cruises of H.M.S.S. *Porcupine* and *Lightning* during the Summers of 1868, 1869, and 1870, under the Scientific Direction of Dr. Carpenter, F.R.S., J. Gwyn Jeffreys, F.R.S., and Dr. Wyville Thomson. By C. WYVILLE THOMSON, LL.D., D.Sc., F.R.S.S. L. and E., F.L.S., F.G.S., &c., Regius Professor of Natural History in the University of Edinburgh, and Director of the Civilian Scientific Staff of the *Challenger* Exploring Expedition. With numerous Illustrations and Maps. London.

(2.) *Reports of Deep Sea Explorations carried on in H.M.S.S. Lightning, Porcupine, and Shearwater, in the years 1868, 1869, 1870, and 1871*. 'Proceedings of the Royal Society,' Nos. 107, 121, 125, and 138.

(3.) *H.M.S. Challenger: Reports of Captain G. F. Nares, R.N., with Abstracts of Soundings and Diagrams of Ocean Temperature in the North and South Atlantic Oceans*. Published by the Admiralty: 1873.

(4.) *Lecture on 'The Temperature of the Atlantic,' delivered at the Royal Institution, on March 20th, 1874*. By WILLIAM B. CARPENTER, M.D., LL.D.

* 'Proceedings of the Royal Geographical Society,' January, 1871.

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par with the discovery of the circulation of the blood in physiology; and Professor Wyville Thomson's doctrine of the Continuity of the Chalk-formation on the bed of the Atlantic, from the Cretaceous epoch to the present time, of which Mr. Kingsley has spoken as a 'splendid generalization, to have added which to the sum of human knowledge is a glorious distinction.'

No stronger testimony could have been given to the opinion entertained by the most competent judges, as to the great value of the work already done, and the probability that a far richer harvest would be gathered by the prosecution of similar researches on a more extended scale, than the fact that our late Government, certainly not unduly liberal in its encouragement of Science, unhesitatingly adopted the proposal for a scientific circumnavigation expedition submitted to the Admiralty by Dr. Carpenter on the part of himself and his colleagues, fitted out the *Challenger* with every appliance asked for by the committee of the Royal Society to which the scientific direction of the expedition was entrusted, and sent her forth fully equipped for her work, under the command of one of the ablest surveying officers in the naval service, together with a complete civilian scientific staff, under the experienced direction of the distinguished Naturalist by whom the inquiry was initiated, and who had taken an active share in the earlier prosecution of it.

Professor Wyville Thomson's beautifully illustrated volume, entitled 'The Depths of the Sea,' which made its appearance on the eve of the departure of the *Challenger* expedition, gives a highly interesting account of the explorations carried on by Dr. Carpenter and himself in the tentative *Lightning* cruise of 1868, and by the same gentlemen, with the co-operation of Mr. J. Gwyn Jeffreys, in the *Porcupine* exploration which extended over the four summer months of 1869. In the work of the following year, which extended into the Mediterranean, Professor Wyville Thomson was prevented by illness from participating, and its results are but slightly noticed in his volume. And of the results of Dr. Carpenter's second visit to the Mediterranean in 1871, no mention whatever is

made, as they had not long been published when 'The Depths of the Sea' made its appearance. They constitute, however, the subject of two very elaborate reports in the 'Proceedings of the Royal Society,' in which Dr. Carpenter fully develops his doctrine in regard to Oceanic Circulation, meets the objections which had been raised to it, and discusses the question of the Gulf Stream (necessarily mixed up with it) on the basis of the most recent information. And, as his views have received very striking confirmation from the observations made during the survey of the North and South Atlantic Oceans by the *Challenger*, of which the results have been recently published by the Admiralty as the first fruits of the circumnavigation Expedition, we shall treat this portion of the subject in accordance with Dr. Carpenter's doctrine, rather than with that of Professor Wyville Thomson. The latter, while devoting a special chapter of his work to 'The Gulf Stream,' seems to have proceeded on a foregone conclusion in regard to the extent of its agency, which weakens the value of his argument; and hence, while cordially commending every other portion of Professor Wyville Thomson's book to the attention of our readers, we would ask them in perusing this chapter to suspend their judgment, until they have acquainted themselves with the arguments which may be advanced on the other side.

We propose, in the following sketch of the results of these inquiries, to dwell on the generalizations to which they point, rather than on any of the multitudinous details which they have added to our Physical and Biological knowledge. A very interesting selection of these has been made by Professor Wyville Thomson; and there is not one of his admirable figures and descriptions, which will not be deeply interesting to every one who is possessed of but an elementary knowledge of Zoology, as showing what manner of creatures they are which dwell in those depths which were previously deemed uninhabitable.

The state of our previous knowledge, or rather of our ignorance, in regard to the condition of the Deep Sea, is thus graphically described by Professor Wyville Thomson:—

'The sea covers nearly three-fourths of the surface of the earth, and, until within the last few years, very little was known with anything like certainty about its depths, whether in their physical or their biological relations. The popular notion was, that after arriving at a certain depth the conditions became so peculiar, so entirely different from those of any portion of the earth to which we have access, as to preclude any other idea than that of a waste of utter darkness, subjected to such stupendous pressure as to make life of any kind impossible, and to throw insuperable difficulties in the way of any attempt at investigation. Even men of science seemed to share this idea, for they gave little heed to the apparently well-authenticated instances of animals, comparatively high in the scale of life, having been brought up on sounding lines from great depths, and welcomed any suggestion of the animal having got entangled when swimming on the surface, or of carelessness on the part of the observers. And this was strange, for every other question in physical geography had been investigated by scientific men with consummate patience and energy. Every gap in the noble little army of martyrs striving to extend the boundaries of knowledge in the wilds of Australia, on the Zambesi, or towards the North or South Pole, was struggled for by earnest volunteers; and still the great ocean slumbering beneath the moon covered a region apparently as inaccessible to man as the Mare Serenitatis.' (p. 2.)

Thanks, however, to the enterprise of the scientific men who commenced the inquiry, to the support which they received from the Royal Society, and to the efficient means placed at their disposal year after year by the Admiralty, it has been shown that, with sufficient power and skill, an ocean of three miles' depth may be explored with as much certainty, if not with as much ease, as what may now be considered the shallows around our shores, lying within 100 fathoms of the surface.

'The bed of the deep sea, the 140,000,000 of square miles which we have now added to the legitimate field of natural history research, is not a barren waste. It is inhabited by a fauna more rich and varied on account of the enormous extent of the area; and with the organisms in many cases apparently even more elaborately and delicately formed, and more exquisitely beautiful in their soft shades of coloring and in the rainbow tints of their wonderful phosphorescence, than the fauna of the well-known belt of shallow water teeming with innumerable invertebrate forms, which fringes the land. And the forms of these hitherto unknown living beings, and their mode of life, and their relations to other organisms, whether living or extinct, and the phenomena and laws of their geographical distribution, must be worked out.' (p. 4.)

The first point to be determined in the exploration of what are often called the 'fathomless abysses' of the ocean, is their actual *depth*. This, it might be supposed, would be very easily ascertained by letting down (as in ordinary 'sounding') a heavy weight attached to a line strong enough to draw it up again, until the weight touches the bottom; the length of line carried out giving the measure of the depth. But this method is liable to very great error. Although a mass of lead or iron thrown freely into the sea would continue to descend at an increasing rate (at least until the augmented friction of its passage through the water should neutralize the accelerating force of gravity), the case is quite altered when this mass is attached to the end of a thick rope, of which the immersed length increases as the weight descends. For the friction of such a rope comes to be so great, when a mile or two has run out, as seriously to reduce the rate of descent of the weight, and at last almost to stop it; and since the upper part of the rope will continue to descend by its own gravity (which, when the rope has been wetted throughout, so as to hold no air between its fibres, considerably exceeds that of water), any quantity of it may be drawn down, without the bottom being reached by the weight at its extremity. Further, if there should be a movement, however slow, of any stratum of the water through which it passes, this movement, acting continuously against the extended surface presented by the rope, will carry it out horizontally into a loop or 'bight,' the length of which will depend upon the rate of the flow and the time during which the line is being acted on by it. Under such circumstances it is impossible that the impact of the weight upon the bottom, even if it really strikes the ground, should be perceptible above; and thus the quantity of rope which runs out may afford no indication of the actual depth of the sea-bed. Hence all those older 'soundings' which were supposed to justify the statement that the bottom of the ocean lies in some places at not less than six or eight miles depth,—still more, those which represented it as absolutely unfathomable,—are utterly untrustworthy.

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for obtaining more correct measurements, of several of which illustrated descriptions will be found in Professor Wyville Thomson's pages. One principle may be said to be common to them all; namely, that regard should be had, not so much to the recovery of the plummet or 'sinker,' as to securing the vertical direction of the line to which it is attached, so that the measurement of the amount run out may give as nearly as possible the actual depth of water through which the sinkers have descended. Now as it is by the friction of the line through the water that the rate of descent of the plummet is increasingly retarded, it is obvious that the size of the line should be reduced to a minimum; but since, for the purposes of scientific exploration, it is requisite to send down and bring up again thermometers and water-bottles, as well as to obtain samples of the bottom, it is now found desirable to employ, not the fine twine or silk thread of the earlier instruments constructed on this plan, but a line about the thickness of a quill, which, if made of the best hemp, will bear a strain of more than half a ton. The plummet being disengaged by a simple mechanical contrivance, and being left on the sea-bed, the instruments only are drawn up by the line.

The trustworthiness of the modern method of sounding is shown by the coincidence of the results obtained by different marine surveyors. Thus the *Porcupine* soundings taken about 200 miles to the west of Ushant, which reached to a depth of 2,435 fathoms, correspond very closely with the soundings previously taken in the same locality for the French Atlantic cable; and the soundings taken by the *Porcupine* and the *Shearwater* in the Strait of Gibraltar, bear an equally exact correspondence with those previously laid down in the Admiralty charts, on the authority partly of our own and partly of French surveyors; though the deeper and narrower part of this Strait, in which the current runs the strongest, had been formerly pronounced 'unfathomable.' Hence it may be said that the ocean depths, on areas that have been carefully examined, are known with almost the same exactness as the heights of mountain ranges. Until very recently there

was reason to believe that the depth of the North Atlantic nowhere exceeds about 2,800 fathoms (16,800 feet); but the *Challenger* has recently met with the extraordinary depth of 3,800 fathoms (more than four miles), a little to the north of St. Thomas's; and that this result did not proceed from an accidental error, is shown by the fact that two thermometers, protected in the manner to be hereafter described, which had been tested under a hydrostatic pressure of three tons and a half (corresponding to a column of 2,800 fathoms) were crushed by the excess.

Before proceeding to inquire into the relation which the Depth of the Ocean bears to its temperature, and to the distribution of animal life on the sea-bed, we may stop to point out how important is a knowledge of the exact depth of the sea-bottom to the geologist. It is only by such knowledge that he can judge what departures from the present distribution of land and sea would have been produced by those changes of level, of which he has evidence in the upheaval and submergence of the stratified deposits that formed the ocean-bed of successive geological periods; or that he can obtain the clue to the distribution of the animal and vegetable forms, by which he finds those periods to have been respectively characterized. For example, a knowledge of the comparative shallowness of the seas that surround the British Islands, enables us readily to understand the former connection of our islands, not merely with each other, but with the Continent of Europe. For they stand upon a sort of platform, of which the depth is nowhere greater than 100 fathoms; so that an elevation of 600 feet (only half as much again as the height of St Paul's) would not only unite Ireland to Great Britain, and extend the northern boundary of Scotland so as to include the Orkney and Shetland Islands, but would obliterate a large part of the North Sea, which (with the exception of a narrow channel along the coast of Norway and Sweden) would become a continuous plain, connecting our present eastern coast with Denmark, Holland, and Belgium; would in like manner wipe out the British Channel, and unite our southern coast with the present northern shores of

France; and would carry the coast-line of Ireland a long distance to the west and south-west, so as to add a large area of what is now sea-bottom to its land-surface. Even an elevation not greater than the height of St. Paul's, would establish a free land communication between England and the Continent, as well as between England and Ireland. And thus we see how trifling a change of level, by comparison, would have sufficed to produce those successive interruptions and restorations of continuity, of which we have evidence in the immigrations of the Continental mammalia, on each emergence that followed those successive submergences of which we have evidence in our series of Tertiary deposits.*

Many of our readers, we doubt not, have been in the habit—as we formerly were ourselves—of looking at the Mediterranean as only a sort of British Channel on a larger scale; whereas it is a basin of quite another character. For whilst the separation between Great Britain and the Continent may be pretty certainly attributed to the removal, by denudation, of portions of stratified deposits that were originally continuous, the extraordinary depth of the Mediterranean basin can scarcely be accounted for on any other hypothesis than that of the subsidence of its bottom; which was, perhaps, a part of that 'crumpling' of the earth's crust, which occasioned the elevation of the high mountain chains in its neighborhood. This great inland sea may be said to consist of two basins; the western extending from the Strait of Gibraltar to the 'Adventure' and 'Skerki' banks, which lie between Sicily and the Tunisian shore; while the eastern extends from the Adventure bank to the coast of Syria. Now, over a large part of the former area, the depth ranges to between 1000 and 1500 fathoms, being often several hundred fathoms within sight of land; and over a large part of the latter, it ranges from 1500 to 2000 fathoms, the descent being so rapid that a depth of upwards of 2000 fathoms (above 12,000 feet) is met with at not more than fifty miles to the east of Malta. But the ridge between Capes Sparte and Trafalgar, which constitutes

the 'marine watershed' between the Mediterranean and the Atlantic basins, is nowhere more than 200 fathoms in depth; and as the Adventure and Skerki banks, which lie between Sicily and the Tunisian coast, are within that depth (some of their ridges being not more than fifty fathoms from the surface, it is obvious that an elevation of 1200 feet, by closing the Strait of Gibraltar, and uniting Sicily with Africa, would convert the Mediterranean into two great salt-water lakes, still of enormous depth, and of but slightly reduced area, as is shown in regard to the Western basin, in Plate v. of 'The Depths of the Sea.' That such a partition did at one time exist, is evident from the number and variety of the remains of large African mammalia entombed in the caves of Sicily and in the tertiary deposits of Malta. Thus in caverns of the hippurite limestone, not far from Palermo, there is a vast collection of bones of the hippopotamus, associated with those not only of the *Elephas antiquus*, but of the living African elephant. And in Malta there have been found remains of several species of elephants; amongst them a *pigmy* of about the size of a small ass. It is not a little curious that there is distinct evidence of considerable local changes of level, in various parts of the Mediterranean area, within the human period. Thus Captain Spratt has shown that the Island of Crete has been raised about twenty-five feet at its western extremity, so that ancient ports are now high and dry above the sea; while at its eastern end it has sunk so much that the ruins of old towns are seen under water. And on the southern coast of Sardinia, near Cagliari, there is an old sea-bed at the height of nearly 300 feet above the present level of the Mediterranean, which contains not merely a great accumulation of marine shells, but numerous fragments of antique pottery—among them a flattened ball with a hole through its axis, which seems to have been used for weighting a fishing-net.

It is doubtful, however, whether the western basin of the Mediterranean was ever cut off from the Atlantic; for though there is pretty clear evidence of former continuity between the two 'Pillars of Hercules,' the evidence is equally clear of a depression of the south-western portion of France at no remote geological period; so that a wide communication would have

* See Professor Ramsay's 'Physical Geology and Geography of Great Britain,' chap. xli.

existed between the Bay of Biscay and the Gulf of Lyons, along the course of the present canal of Languedoc. And certain very curious conformities between the marine fauna of the Mediterranean and that of the Arctic province, are considered by Mr. Gwyn Jeffreys as indicating that Arctic species which migrated southwards in the cold depths congenial to them, found their way into the Mediterranean through this channel. We shall presently see what very important modifications in the condition of this great Inland Sea, affecting its power of sustaining animal life, would result from any considerable increase in the depth of its channel of communication with the great Oceanic basin, from which all but its superficial stratum is now cut off.

Another most interesting example of the importance of the information supplied by exact knowledge of the Depth of the sea, is furnished by the inquiries of Mr. A. R. Wallace in regard to the geographical distribution of the fauna of the Eastern Archipelago. For while Java, Sumatra, and Borneo clearly belong to the Indian province, Celebez, the Moluccas, and New Guinea no less clearly belong to the Australian; the boundary-line between them passing through the Strait of Lombok—a channel which, though no more than fifteen miles in width, separates Faunæ not less differing from each other than those of the Old and the New Worlds. The explanation of these facts becomes obvious, when we know that an elevation of no more than fifty fathoms would unite Borneo, Sumatra, and Java with each other, and with the peninsula of Malacca and Siam; while an elevation of 100 fathoms (600 feet) would convert nearly the whole of the bed of the Yellow Sea into dry land, and would reunite the Philippine Islands with the south-eastern part of the Continent of Asia. But even the latter elevation would not connect the upraised area with the Australian province, the depth of the narrow dividing strait being greater than that of any part of the large Asiatic area now submerged. In some parts of the Australian portion of the Eastern Archipelago, indeed, there are some very extraordinary and sudden depressions, showing the activity of the changes which have taken place in the crust of this portion of the earth within a very recent geological period. Thus, whilst every

geologist knows that the Himalayas are not only the highest, but among the newest of great mountain ranges—even the later Tertiary deposits lying in slopes high up on their flanks—it is not a little curious to find the almost land-locked Celebez Sea going down to the enormous depth of 2800 fathoms, or three miles. That this remarkable depression is in some way connected with the volcanic activity of the region, may be surmised from the fact that the similar hollow, *nearly a thousand fathoms deeper*, lately found by the *Challenger* a little to the north of St. Thomas's, lies at what may be regarded as the northern termination of that 'line of fire,' which has elevated the chain of islands that separate the Caribbean Sea from the Atlantic Ocean.

In the general uniformity of depth of the present area of the North Atlantic, however, and in the conformation of its boundaries on either side, we have evidence that this vast basin was a deep sea at least as far back as the Cretaceous epoch. From the edge of the 100-fathom platform on which the British Isles are based, and which extends about fifty miles to the westward of the coast of France, between Brest and Bayonne, the bottom rapidly descends to 1500 fathoms, and generally to more than 2000; so that, with the exception of the modern volcanic plateau of the Azores, the sea-bed of the North Atlantic undulates gently from the European to the American coast, at an average depth of at least 2000 fathoms, or 12,000 feet.* Now, as Professor Wyville Thomson remarks, all the principal axes of elevation in the North of Europe and in North America have a date long anterior to the deposition of the Tertiary, or even of the newer Secondary strata; though some of them, such as those of

* The Bermuda group has been shown by the *Challenger* soundings to rise like a vast column from a small base lying at a depth of more than three miles; and since there is no submarine ridge of which it could be supposed to be an outlier, and the islands are themselves entirely composed of Coral, it seems likely that we have here a typical exemplification of Mr. Darwin's remarkable doctrine, that though the reef-building coral animals cannot live and grow at a greater depth than twenty fathoms, yet that by the slow progressive subsidence of the bottom, and the contemporaneous addition of new coral to the summit, a pile of coral limestone may be built up (or rather may grow up) to any height.

the Alps and Pyrenees, have received great accessions to their height in later times. All these newer beds have, therefore, been deposited with a distinct relation of position to certain important features of contour, which, dating back to more remote periods, are maintained to the present day:—

‘Many oscillations have doubtless taken place, and every spot on the European plateau may have probably alternated many times between sea and land; but it is difficult to show that these oscillations have occurred in the North of Europe to a greater extent than from 4000 to 5000 feet, the extreme vertical distance between the base of the tertiaries and the highest point at which tertiary or post-tertiary shells are found on the slopes and ridges of mountains. A subsidence of even 1000 feet would, however, be sufficient to produce over most of the northern land a sea 100 fathoms deep—deeper than the German Ocean; while an elevation of a like amount would connect the British Isles with Denmark, Holland, and France, leaving only a long deep fjord separating a British peninsula from Scandinavia.’ (p. 473.)

There is abundant evidence that these minor oscillations, with a maximum range of 4000 or 5000 feet, have occurred over and over again all over the world within comparatively recent periods, alternately uniting lands, and separating them by shallow seas, *the position of the deep waters remaining the same*. And though mountain ridges have been elevated from time to time, to heights equalling or exceeding the average depth of the Atlantic, there is no reason whatever to believe that any area at all comparable to that of the North Atlantic has ever changed its level to the extent of 10,000 feet. As Sir Charles Lyell has remarked (‘Principles of Geology,’ 1872, p. 269):—

‘The effect of vertical movements equally 1000 feet in both directions, upwards and downwards, is to cause a vast transposition of land and sea in those areas which are now continental, and adjoining to which there is much sea not exceeding 1000 feet in depth. But movements of equal amount would have no tendency to produce a sensible alteration in the Atlantic and Pacific Oceans, or to cause the oceanic and continental areas to change places. Depressions of 1000 feet would submerge large areas of existing land; but *fifteen times as much movement* would be required to convert such land into an ocean of average depth, or to cause an ocean three miles deep to replace any one of the existing continents.’

Thus, then, whilst the wide extent of Tertiary strata in Europe and the North of

Africa sufficiently proves that much dry land has been gained in tertiary and post-tertiary times along the European border of the Atlantic, while the great mountain masses of Southern Europe give evidence of much local disturbance, it is extremely improbable that any such contemporaneous depression could have taken place, as would have sufficed to produce the vast basin of the Atlantic. For as Professor Wyville Thomson justly remarks:—

‘Although the Alps and the Pyrenees are of sufficient magnitude to make a deep impression upon the senses of men, taking them together, these mountains would, if spread out, only cover the surface of the North Atlantic to the depth of six feet; and it would take at least 2000 times as much to fill up its bed. It would seem by no means improbable, that while the edges of what we call the great Atlantic depression have been gradually raised, the central portion may have acquired an equivalent increase in depth; but it seems most unlikely that while the main features of the contour of the northern hemisphere remain the same, an area of so vast an extent should have been depressed by more than the height of Mont Blanc.’ (p. 477.)

We quite agree with him, therefore, in the belief that a considerable portion of this area must have been constantly under water during the whole of the Tertiary period; and looking to the relation of this area to that of the old Cretaceous sea which formerly occupied the place of a large part of what is now the continent of Europe, we feel justified in concurring with Mr. Prestwich* in the conclusion that this sea extended continuously from Asia to America. It may well have been that when the European portion of that sea bottom underwent elevation into the chalk cliffs of Dover, a corresponding subsidence took place in the Atlantic area. But this subsidence would have only added a little to the depth of what must have previously been an enormously deep basin, without altering its condition in any essential degree; and thus on *physical* grounds alone we seem justified in concluding that an essential continuity must have existed in the deposits progressively formed on this seabottom, from the Cretaceous epoch to the present time. How strikingly this conclusion harmonizes with the results obtained by the *biological* exploration of the ‘Depths of the Sea,’ will be shown hereafter.

The *pressure* exerted by the waters of

* Presidential Address to the Geological Society, 1871.

the ocean, either upon its bed, or upon anything resting upon it, may be readily calculated from its depth; for the weight of a column of one inch square is almost exactly a ton for every 800 fathoms of its height; and consequently the pressure at 2400 fathoms depth, is *three tons upon every square inch*, while at 3800 fathoms it is *nearly five tons*. How life can be sustained under this enormous pressure, is a question to be considered hereafter; at present we shall speak only of its effects on the instruments employed to determine the *temperature* of the deep sea,—a part of the inquiry which is second to none in interest and importance. For while it is from accurate observations of the temperature of the ocean-bottom, that we derive our knowledge of those differences of submarine climate, on which the distribution of animal life mainly depends, it is from observations of the temperature of successive strata that we derive our chief information as to that great system of *oceanic circulation*, which, altogether independent of those superficial currents that have their origin in winds, has a most powerful influence upon terrestrial climate,—modifying alike the extremes of equatorial heat and of polar cold,—and also, by bringing every drop of ocean-water at some time or other to the surface, gives to it the power of sustaining animal life on its return to the sea-bed over which it flows, at depths, it may be, of thousands of fathoms.

It was in consequence of the remarkable character of the Temperature-observations made in the Channel between the North of Scotland and the Faroe Islands, in the tentative *Lightning* cruise of 1868, that the importance of obtaining thoroughly trustworthy observations of ocean-temperature was first brought prominently into notice. At that time the doctrine of a uniform deep-sea temperature of 39° was generally accepted among Physical Geographers, chiefly on the basis of the Temperature-observations made in Sir James Ross's Antarctic Expedition; which were considered by Sir John Herschel as justifying the assumption that the temperature of the sea *rises* with increase of depth in the two Polar areas, while it *sinks* with increase of depth in the Equatorial zone,—there being an intermediate line of division between these regions, corresponding with the annual isotherm of 39° , on which the temperature of the sea is uniform from

the surface to the bottom. It is true that lower bottom-temperatures than 39° had been occasionally observed, even in the intertropical zone; but these were considered as proceeding from special "polar currents." Thus the United States coast surveyors had met with a temperature of 35° in the very channel of the Gulf Stream, the surface-temperature of which was 80° ; and Captain Maury regarded this as a cold current coming down from the north beneath the Gulf Stream, to replace the warm water which is carried by that great surface-current to moderate the cold of Spitzbergen. And Captain Shortland, of H.M.S. *Hydra*, who had surveyed the line between Aden and Bombay, along which a telegraph cable has since been carried, found a temperature of $36\frac{1}{2}^{\circ}$, at depths of from 1,800 to 2,000 fathoms in the bed of the Arabian Gulf, at about 12° north of the equator.

Now the *Lightning* Temperature-soundings, carried on in different parts of the above-mentioned channel, which has an average depth of between 500 and 600 fathoms, showed a difference of from 13° to 15° , at depths almost identical, between points which were sometimes not many miles apart; the bottom temperature, which, according to Sir John Herschel's doctrine, ought to have been everywhere 39° , being as high as 45° on some spots, and as low as 32° on others. With this marked difference of temperature, there was an equally well-marked difference alike in the Mineral characters of the two bottoms, and in the types of Animal life they respectively yielded. For whilst the 'warm area,' as Dr. Carpenter named it, was covered by the whitish globigerina-mud, which may be considered as Chalk in process of formation, and supported an abundant and varied Fauna, of which the *facies* was that of a more southerly clime, the 'cold area' was entirely destitute of globigerina-mud, and was covered with gravel and sand containing volcanic detritus, on which lay a fauna by no means scanty, but of a most characteristically boreal type.

Here, then, whatever might be the error in the determination of the *actual* temperatures, occasioned by the pressure of about three-fourths of a ton per square inch on the bulbs of the thermometers employed, it became obvious that there could be no such error in regard to the striking

differences which showed themselves between Temperature-observations taken at similar depths; and the importance of this phenomenon became so apparent to all who were interested in the inquiry, that as soon as the further prosecution of these researches had been decided on, arrangements were made for testing the effect of pressure upon the thermometers used for deep-sea observations, which are maximum and minimum self-registering instruments of the ordinary (Six's) construction, made with special care to prevent the displacement of the indices by accidental jerks. These instruments being placed under water-pressure in the interior of a hydrostatic press, the very best of them were found to rise 8° or even 10° , when the pressure-gauge indicated three and a quarter tons on the square inch; whilst inferior instruments rose 20° , 30° , 40° , or even 50° under the same pressure. Thus it became obvious that no reliance could be placed on most of the older Temperature-observations taken at great depths; those only being at all to be trusted, which had been taken with instruments whose probable error could be ascertained. Thus the Temperature-soundings taken not long previously in various parts of the North Atlantic by Commander Chimmo, R.N., and Lieutenant Johnson, R.N., gave 44° at depths exceeding 2,000 fathoms; but these, when corrected by an allowance of 8° for the known influence of pressure on thermometers of the Admiralty pattern, would give an *actual* temperature of 36° ; and this agrees very closely with the results of the soundings recently taken by the *Challenger* with trustworthy instruments.

The existence of this most important error having been thus determined, the next question was how to get rid of it; and a very simple plan was devised by the late Professor W. A. Miller, which carried into practice by Mr. Casella, was found to answer perfectly. It is due to Mr. Negretti, however, to state that this plan had been previously devised and adopted by him; and that he had supplied his 'protected' thermometers to Captain Shortland, by whom they were used in the observations mentioned in the preceding page, which, therefore, may be regarded as not far from the truth. The 'protection' consists in the enclosure of the ordinary bulb of the thermometer by an outer bulb sealed round

its neck; the space left between the two being partly filled with spirit or mercury, for the transmission of heat or cold between the medium surrounding the outer bulb and the liquid occupying the inner, but a vacuity being left, which serves to take off pressure entirely from the inner bulb. It is obvious that if the whole intermediate space were occupied by liquid, any diminution of the capacity of the outer bulb would equally compress the inner; but that the vacuity acts as a sort of buffer-spring, entirely taking off pressure from the inner bulb,—the only effect of a reduction of the capacity of the outer bulb, by external pressure, being to diminish the unfilled part of the intermediate space.

All the Temperature-observations since made under authority of the British Admiralty have been taken with these 'protected' thermometers; which were first used in the *Porcupine* expeditions of 1869 and 1870, with the most satisfactory results. Every instrument sent out by the maker is tested to a pressure exceeding three tons, and is rejected if it shows more than the slight elevation of something less than a degree, which is attributable to the increase of the temperature of the water of the interior of the press, occasioned by its rapid compression. And the *Challenger* is furnished with a press of similar power, by which the thermometers in use may be tested from time to time, so as to make sure that they have undergone no deterioration. Two thermometers are used in every observation; and their ordinarily close accordance serves to give to their indications a high degree of trustworthiness, whilst, when they disagree, there is generally but little difficulty in determining, by collateral evidence, which of the two is likely to be wrong. Before proceeding to give a general summary of the Temperature-observations carried out in the *Porcupine* expeditions of 1869 and 1870, with those collected in the North and South Atlantic during the first year of the *Challenger's* work—the results of which, so far as regards this subject, are now before us—we shall correct a prevalent misconception as to the temperature at which seawater attains its maximum density.

Every one knows that fresh water *contracts* (and thus increases in density) as it cools from any higher temperature down to about $39^{\circ} \cdot 2$ Fahr.; and that it then *expands* again (thereby undergoing a dimi-

nution of density) as its temperature is reduced to 32° Fahr. ; so that, when just about to freeze, it has the same density that it had at the temperature of about $46\frac{1}{2}^{\circ}$. And thus it happens that before a pond or a lake is frozen, the surface layers whose temperature has been reduced by atmospheric cold, successively sink, and are replaced by warmer layers rising up from below, until the temperature of the deeper layers has been reduced to $39^{\circ}\cdot 2$; but that, when this stage has been reached, the further chilling of the surface-layer makes it lighter instead of heavier, so that it continues to float upon the warmer water beneath, which retains its temperature of $39^{\circ}\cdot 2$ though covered with a layer of ice or of ice-cold water. This, however, is not the case with Sea-water, which, as was long ago ascertained by Despretz, differs from fresh water in continuing to contract (thus *augmenting* in density) down to its freezing point at about 27° Fahr. ; and thus, when its surface is exposed to extreme atmospheric cold, each layer as it is chilled will descend, and will be replaced by a warmer layer either from beneath or from around; the coldest water always gravitating to the bottom, unless the effect of temperature be modified by some difference in salinity, or by movement of one stratum independently of another. Of the former condition we have an example in the fact that, in the neighborhood of melting ice, the water of which is either fresh (as in the case of icebergs, which are land glaciers that have floated out to sea), or of low salinity (as in the case of field-ice), the surface layer is often colder than the more saline water beneath, on which it floats in virtue of its lower salinity. And the latter case constantly presents itself when some movement of translation slants upwards a deeper and colder stratum; which we shall presently find to be a general fact along the *eastern* coasts of our continents, and to be attributable to the earth's rotation on its axis.

Under ordinary circumstances, then, the *minimum* temperature recorded by self-registering thermometers sent down with the sounding apparatus, may be expected to be the *bottom* temperature; and this expectation has been fully verified by the results of the *serial* Temperature-observations made in the *Porcupine* and *Challenger* expeditions; which have shown that the temperature of the Atlantic undergoes

a progressive reduction from above downwards, but at a rate by no means uniform; and have clearly proved the fallacy of those older observations in which the temperature seemed to *rise* in the deepest stratum—the elevation of the ‘unprotected’ thermometers having been really due to increase of pressure, not to increment of heat.

In order to render the scientific *rationale* of these observations more intelligible, we shall first state the results of the Temperature-soundings taken by Dr. Carpenter in his two visits (1870 and 1871) to the Mediterranean, the peculiar conditions of whose basin have been already adverted to.

We have here a great Inland Sea, of which the depth ranges downwards almost to that of the North Atlantic, and exceeds that of many other large Oceanic areas; whilst its channel of communication with the great Atlantic basin is so shallow on the line of the ‘ridge,’ or ‘marine watershed’ (as Dr. Carpenter terms it), between Capes Sparte and Trafalgar, that all but the most superficial strata of the two basins are completely cut off from each other. Both the summer and the winter surface temperatures are very nearly the same in the two seas, with a slight excess on the side of the Mediterranean, which shows that its warmth is not dependent—as some of the extravagant advocates of the heating power of the Gulf Stream have supposed—on an influx of water from that source. And the rapid reduction of temperature which shows itself in the summer from the surface downwards, alike in the Mediterranean and in the Atlantic under the same parallels, clearly proceeds from the *superheating* of the superficial stratum under the influence of direct solar radiation. The surface temperature of the Mediterranean during the months of August and September ranges between 70° and 80° ; but the thermometer descends rapidly in the first fifty fathoms, the temperature at that depth being about 58° ; and a slight further decrease shows itself between fifty and a hundred fathoms, at which depth the temperature is 54° near the western extremity of the basin, 55° nearer its middle, and 56° in its eastern part. Now from the hundred fathoms’ plane to the bottom, even where it lies at a depth of 2,000 fathoms, the temperature of the Mediterranean is *uniform*, the difference never exceeding a degree. In the winter months, on the oth-

er hand, the temperature, alike of the surface and of the superficial 100 fathoms' stratum, is brought down, by the reduction of the temperature of the superjacent atmosphere, to that of the uniform stratum beneath; so that *the entire column* of Mediterranean water has then a like uniform temperature from its surface to its greatest depths.

Now we hold these observations to be of fundamental importance in two ways. For, in the first place, they show us the limit of the direct heating power of the solar rays that fall on the surface of the sea. There are few parts of the open ocean of which the surface temperature is ever much higher than that of the Mediterranean; the most notable excess being seen in the Red Sea, the enclosure of which between two coast lines, nowhere more than 100 miles apart, while a large portion of it lies within the hottest land area we know, causes its surface temperature occasionally to rise even above 90° . The direct heating power of the solar rays at Aden, as measured by a thermometer with a blackened bulb, exposed on a blackened board, has been seen (in the experience of Colonel Playfair, our former consul at that station) to be above 212° ; but that heat is mainly used up in converting the surface film of the sea into vapor. All experiment shows that solar heat directly penetrates to so small a depth, and that the conducting power of water is so very slight, that some other means must exist for the extension of its influence even to the depth of twenty or thirty fathoms. This extension is attributed by Dr. Carpenter (who is supported in this and other Physical doctrines by the most eminent authorities in that department of Science) to a downward *convection*, taking place in the following mode:—Each surface-film, as it loses part of its water by evaporation, becomes more saline, and, therefore, specifically heavier, notwithstanding the increase of its temperature; and will thus sink, carrying down an excess of heat, until it loses its excess of salt by diffusion. It is, of course, replaced by a fresh film from below; and this will sink in its turn, to be again replaced by a less saline stratum; and the process will go on so long as the superheating action continues. Now, in the Mediterranean the depth of this 'superheating' is limited by the periodical alternation of the seasons; but it might be

expected that under the Equator, where even the winter temperature of the ocean-surface does not fall much below 80° (save under the local influence of cold currents) it would extend further downwards. The *Challenger* observations, however, have shown that this is not the case, the thickness of the superheated stratum being no greater under the Equator than it is anywhere else—a fact of which the significance will presently become apparent.

These Mediterranean observations, when taken in connection with others made elsewhere on the constant temperature of deep lakes, show, in the second place, that the temperature of any enclosed body of water which is sufficiently deep to be but little influenced either by direct solar radiation, or by admixture of water flowing into it from without, will be the *isocheimal*, or lowest mean winter temperature, of the locality. We notice that in Dr. Carpenter's report of his first Mediterranean cruise, he connected it with the temperature of the solid crust of the earth, which there is reason to fix at between 50° and 54° in Central and Southern Europe; this being the constant temperature shown in deep caves and at depths in the soil at which seasonal variations cease to show themselves, while there is as yet no such increment of mean temperature as shows itself at greater depths. But the observations taken during his second Mediterranean cruise, having proved that the temperature of the uniform substratum is higher in the eastern basin than in the western, in accordance with the higher *isocheimal* of the former, whilst those subsequently taken by Captain Nares, in the Gulf of Suez, gave a bottom temperature of 71° at 400 fathoms, even in February, Dr. Carpenter has been led to abandon his first impression, and to regard the constant uniform temperature as determined by the *isocheimal*. And this conclusion, we have reason to believe, will be found to accord well with the results of observations made elsewhere. Thus it has been ascertained by Mr. Buchan, the able Secretary of the Scottish Meteorological Society, that in the deeper parts of Loch Lomond there is a permanent temperature of about 41° , and that this is exactly the mean of the temperature of the air during the winter months in that locality.

Hence, if it were possible for a body of Ocean-water to remain unaffected by any

other thermal agencies than those to which it is itself subjected, it seems clear that all below that superficial stratum of which the temperature varies with the season, would have a constant uniform temperature corresponding to the isothermal of the locality. For whilst *cold* readily extends *downwards*, just as *heat* extends *upwards*, by convection, the extension of *heat* in a *downward* direction is very limited; the power of the sun being mainly expended in surface-evaporation.

As a corollary from the foregoing, it follows that when any stratum of ocean-water has a temperature *below* the isothermal of the locality, it may be presumed to have flowed thither from a *colder* region; whilst, if the temperature of any stratum beneath 100 fathoms be *above* the isothermal, it may be presumed to have flowed thither from a *warmer* region. This is simply to put upon differences of ocean temperature the interpretation we constantly give to variations in the temperature of the Atmosphere; which every one knows to be mainly dependent upon the direction in which the wind is moving. The comparative permanence of the great movements of the Ocean is simply due to that of the antagonistic forces constantly operating to produce them.

A sort of epitome of the general Oceanic Circulation is presented, as Dr. Carpenter has pointed out, in that deep channel between the North of Scotland and the Faroe islands, which was first explored by Professor Wyville Thomson and himself in the *Lightning*, and which was next year examined more particularly by *serial* temperature-soundings taken with 'protected' thermometers at every fifty fathoms' depth. In the north-eastern part of this channel, there was found to be a distinct horizontal division of its water into two strata; the *upper* one *warmer* than the normal, and the *deeper* one far *colder* than the normal, with a 'stratum of intermixture' between the two. The deeper stratum, whose thickness is nearly *two thousand feet*, has a temperature ranging downwards from 32° to 29° ; and it obviously constitutes a vast body of glacial water moving slowly from the Polar Sea to the south-west, to discharge itself into the North Atlantic basin. Traced onwards in this direction, it was found to be diverted by a bank rising in the middle of the channel, so as to be narrowed and at the same time increased in

velocity; as was indicated by the rounding of the pebbles which covered the bottom, and also by the nearer approach of the cold stratum to the surface, consequent upon the shallowing of the bottom off the edge of the Faroe Banks. The other part of the channel was there occupied to its bottom by the warm flow slowly setting from the Mid-Atlantic to the north-east; and thus was formed that division of the bottom at the same depths into 'cold' and 'warm areas,' which was noticed in the *Lightning* cruise, and which was found to exert so important an influence on the distribution of animal life; whilst, when difference of depth also came in as an element, a difference of bottom-temperature amounting to *fifteen degrees* sometimes showed itself within a distance of *three or four miles*.

On applying the same test to the deep Temperature-soundings taken in the *Porcupine*, off the western coast of Portugal, in the same parallel as the middle of the western basin of the Mediterranean, we find that they plainly indicate the derivation of a large part of the deeper water of the Atlantic basin from a Polar source. For while the temperature of its superficial stratum varies with the season, being rather below that of the Mediterranean in the summer, and about the same in winter, there is beneath this a stratum of several hundred fathoms, which shows so slow a reduction down to about 700 fathoms that the thermometer only falls to 49° . But between 700 and 900 fathoms there is a distinct 'stratum of intermixture,' comparable to that encountered in the 'Lightning Channel,' in which the thermometer falls *nine or ten degrees*; and beneath this is a vast body of water, ranging downwards from 900 fathoms to 2000 or more, of which the temperature shows a progressive reduction to 36° or $35^{\circ}5$.

There is here no distinct evidence of the presence of water *warmer* than the normal; but such evidence is very clearly afforded by the *Porcupine* temperature-soundings taken at various points between the latitude of Lisbon and that of the Faroe Islands, extending northwards through a range of twenty-five degrees of latitude. For while these show a considerable progressive reduction of temperature alike at the surface and in the first 100 fathoms, they also show that in the thick stratum between 100 and 700 fathoms, the reduc-

tion is so slight as we proceed northwards, that the temperature of the whole of this stratum presents a greater and greater elevation above the isochimal of the locality,—thus clearly indicating its derivation from a southern source.

On these facts Dr. Carpenter has based a doctrine of a General Oceanic Circulation, sustained by the *opposition of temperature* between the Polar and Equatorial areas; which produces a disturbance of hydrostatic equilibrium sufficient to produce a *creeping flow* of a deep stratum of water from the polar to the equatorial area, while the superficial stratum is slowly draughted from the equatorial towards the polar areas. This *vertical* circulation he considers to be altogether independent of the *horizontal* circulation produced by Winds, which shows itself in definite currents, of which the most notable are the Gulf Stream of the North Atlantic, and the Kuro Siwo of the North Pacific—which owe their origin to the action of the trade winds on the equatorial portions of the Atlantic and Pacific Oceans respectively,—and the monsoon currents of the Indian Ocean. Dr. Carpenter's doctrine has thus scarcely any resemblance to that of Captain Maury, who attributed the Gulf Stream to the *elevation of level* in the inter-tropical area, produced by the elevation of temperature; a notion which was effectually disposed of by Sir John Herschel, who showed that no elevation of level that could be thus occasioned could possibly produce so rapid and powerful a current. And the only feature common to the two, is the existence of an underflow from the Pole towards the Equator; which Captain Maury advocated without any definite conception of the conditions under which it would be produced; while, according to Dr. Carpenter, a *vera causa* for this underflow (as also of the complemental upperflow in the opposite direction) is supplied by the action of Polar Cold, of which the following is an experimental illustration:—

'Let a long narrow trough, with glass sides, be filled with water having a temperature of 50°, and let cold be applied to the surface of the water at one end, whilst heat is similarly applied at the other. By the introduction of a coloring liquid, mixed with gum of sufficient viscosity to prevent its too rapid diffusion, it will be seen that a *vertical circulation* will be set up in the liquid; for that portion of it which has been acted on by the surface cold, becoming thereby increased in density, falls to the

bottom, and is replaced by a surface-flow, which, when cooled in its turn, descends like the preceding; and the denser water, in virtue of its excess of *lateral* pressure, creeps along the bottom of the trough towards the other end, where it gradually moves upwards to replace that which has been draughted off. As it approaches the surface, it comes under the influence of the heat applied to it; and being warmed by this, it carries along its excess of temperature in a creeping-flow towards the cold extremity, where it is again made to descend by the reduction of its temperature; and thus a circulation is kept up, as long as this antagonism of temperature at the two ends of the trough is maintained. The case, in fact, only differs from that of the hot-water apparatus used for heating buildings in this,—that whilst the *primum mobile* in the latter is heat applied below, which causes the water to rise in it by the diminution of its specific gravity, the *primum mobile* of the circulation in the trough is cold applied at the surface, which causes the water to descend through the increase of its specific gravity. The application of surface-heat at the other end of the trough would have scarcely any effect *per se* in giving motion to the water; but it serves to maintain the disturbance of equilibrium, which, if cold alone were in operation, would gradually decrease with the reduction of temperature of the entire body of water in the trough, which would cease to circulate as soon as its temperature should be brought to one uniform degree of depression.'

It is maintained by Dr. Carpenter, that between a column of Polar water, of which the average temperature will be below 30°, and a column of Equatorial water of an average temperature of (say) 40°, such a difference of *downward*, and therefore of *lateral*, pressure *must* exist, as will suffice to maintain a slow circulation in the great Ocean-basins, corresponding to that in the trough; the heavier polar water moving along the floor of the basin towards the equator, and gradually rising there towards the surface, as each new arrival pushes up that which preceded it; whilst an upper stratum of lighter equatorial water will be continually moving towards each pole, in virtue of the indraught produced by the downward movement of the polar column. In this doctrine he is supported by the authority of Sir John Herschel (who addressed to him on this subject one of his last scientific letters), of Sir William Thomson, and Sir George Airy, who all concur in sanctioning his proposition as dynamically correct.* But

* It is further noteworthy that Pouillet, one of the greatest authorities of his time in Thermotics, had long ago (1847) expressed the opin-

as his colleague, Professor Wyville Thomson, has expressed his dissent—so far, at least, as regards the cause of the amelioration of the climate of North-Western Europe—it is but fair to Dr. Carpenter to point out that his doctrine has received from the results of the *Challenger* investigations in the Atlantic, that strong confirmation which is afforded by the precise verification of a prediction. For in his later reports Dr. Carpenter gave expression to the following conclusions from the data at that time before him:—

1. That the whole mass of water in the North Atlantic below about 900 fathoms depth, will have a temperature of from 40° to 36° , this reduction depending on an inflow of Arctic water into its basin, which brings down, as in the case already cited, a temperature which may be even below 30° ; but that the limitation of the supply of this Arctic water will prevent as great a reduction in the bottom-temperature of the Mid-Atlantic, as is seen elsewhere. For, putting aside what may possibly come down from Baffin's Bay, which is not likely to be much, there can be no southward underflow of Arctic water, except through the channel between Greenland and Iceland, which is not a very wide one, and the still narrower channel between the North of Scotland and the Faroe Islands; the bank which extends between the Faroe Islands and Iceland, and the shallowness of the bed of the North Sea, presenting an effectual barrier to the exit of the glacial water of the Arctic basin through those passages.

2. That, on the other hand, the unrestricted communication between the Antarctic basin and that of the South Atlantic, by allowing the free flow of polar water over the bed of the latter, would reduce its bottom-temperature below that of the North Atlantic; and that the influence of this predominant Antarctic underflow might perhaps extend to the north of the Equator.

3. That in the Equatorial region, from which the upper warm stratum is being

continually draughted off towards each pole, whilst the two Polar streams, which meet on the bottom, are as continually rising towards the surface, water below 40° would lie at a less depth beneath the surface, than it does in the temperate regions of the North and South Atlantic.

Now the *Challenger* soundings taken in various parts of the Mid-Atlantic show (1) that the general temperature of the North Atlantic sea-bed, between the latitude of Lisbon and the Azores, and the tropic of Cancer, ranges from 40° Fahr. at the depth of about 900 fathoms, to $35^{\circ}5$ at a depth of 3,150; so that this sea-bed is overlaid by a stratum of almost ice-cold water, having an average thickness of *ten thousand feet*, which, if it has not *all* come from one or other of the Polar areas, must contain a large admixture of water that has brought with it a glacial temperature. But (2) as the *Challenger* approached the Equator, the bottom-temperature, instead of rising, was found to sink yet lower; $34^{\circ}4$ being reached at 3,025 fathoms in the neighborhood of St. Thomas's (lat. $18^{\circ}\frac{1}{2}$ N.), and $32^{\circ}4$ at 2,475 fathoms, half-way between St. Paul's Rocks in lat. 1° N.; and Fernando Noronha in lat. 5° S. Further, the temperature-section taken by the *Challenger* in crossing from Brazil to the Cape of Good Hope, shows the South Atlantic to be altogether considerably colder than the North Atlantic under the same parallels; not only the surface-temperature being lower, but the bottom being colder by from 2° to 3° . And (3) it was found, as the *Challenger* proceeded southward from the Azores, past Madeira, to the Equator, that the line of 40° progressively approached the surface, from the depth of 900 fathoms at which it lay at the Azores, to only 300 fathoms at the Equator, where the descent of the thermometer from the surface-temperature of 78° was *more rapid than in any other locality*, more than a degree being lost for every ten fathoms. That in the South Atlantic the line of 40° rises much nearer the surface than it does in the North Atlantic,—lying in the former ocean at an average depth of only about 400 fathoms,—seems attributable in part to the general depression of its temperature, which is due to a variety of causes; the loss of heat from the surface to the 40° line, between lat. 35° S. and lat. 38° S., being only about 15° , or at the rate of one degree for

ion that a surface-movement from the Equator towards the Poles, and a deep movement from the Poles towards the Equator, would best express the facts of ocean-temperature then known; though that opinion was afterwards pushed aside for a time, by the prevalence of the erroneous doctrine of a uniform deep-sea temperature of 39° .

every twenty-six fathoms. But it seems not improbable that the comparative warmth of the upper stratum of the North Atlantic is due to the transport of a large body of Equatorial water as far north as the parallel of 40° ; not so much, however, by the *true* Gulf Stream or Florida current, as through the northward deflection, by the chain of West India Islands and the Peninsula of Florida, of that large portion of the Equatorial Current which strikes against them without entering the Caribbean Sea at all.

We are thus led to the question which is very fully discussed both in Dr. Carpenter's last report, and in Chapter VIII. of Professor Wyville Thomson's book, as to the influence of the Gulf Stream upon the climate of North-Western Europe; and this is a subject of such general interest, that, as there is a decided difference of opinion between these two authorities, our readers will naturally desire to know the precise nature of the doctrine advocated by each, and the principal arguments on which it rests.

It is admitted on both sides that the climate of the western shores of the British Islands, still more that of the Shetlands and the Faroes, and yet more again that of the northern part of the Norwegian coast, of the north coast of Russia, at least as far as the entrance of the White Sea, and even of Iceland and Spitzbergen, is ameliorated by a north-east flow of surface water, bringing with it the warmth of a lower latitude. For although Mr. Findlay in this country, and Dr. Hayes (the Arctic explorer) in the United States, have attributed this amelioration to the prevalence of south-west Winds alone, yet the recent correlation of a large body of comparative observations on the winter temperature of the Sea and of the Air has clearly shown that the former—as we proceed north—has so much higher an average than the latter, as to be clearly independent of it. Now Professor Wyville Thomson accepts the current doctrine that this north-east flow is an extension of the Gulf Stream, using that term, however, to include, with the *true* Gulf Stream or Florida current, the portion of the Equatorial current which never enters the Gulf of Mexico; and he considers that the whole of that vast body of water, extending downwards to at least 600 fathoms, which the temperature-soundings of the *Porcupine*

have shown to be slowly creeping northwards is impelled by the *vis a tergo*, or propulsive force imparted to the Equatorial Current by the Trade-winds. That this propulsive force here extends itself downwards to a depth far greater than that of either the Equatorial or the Gulf Stream current, he attributes to the re-collection of its waters in the *cul de sac* formed by the north-eastern corner of the Atlantic, and the gradual narrowing of the channel through which it is impelled. But this is entirely inconsistent with the fact, shown in his own chart of Dr. Petermann's isothermal lines, that the northward movement extends *all across the Atlantic*, from the coast of Ireland to Newfoundland; the isotherms there turning sharply round the corner, and running to the north, and even to the north-west, in a manner that cannot possibly be accounted for by the propulsive force which is carrying the *real* Gulf Stream nearly due east. In fact, Professor Wyville Thomson seems to us to have fallen into the error of his leader Dr. Petermann and other physical geographers, in assuming that the proved excess of temperature in the Arctic area can be due to nothing else than 'the Gulf Stream.' If, by this term, they avowedly mean nothing else than a northward movement of warm water from the Mid-Atlantic, we are entirely at one with them; only deprecating the application of the term 'Gulf Stream' to that movement, as leading to a misconception. But if they distinctly attribute it, with Professor Wyville Thomson, to the action of the trade-winds, we ask them for some intelligible *rationale* of the manner in which the Trade-wind circulation drives northwards into the Polar area a body of water more than 2,000 miles wide and 700 fathoms deep.

Dr. Carpenter, on the other hand, who finds a definite *vera causa* for this movement in the indraught of the whole *upper* stratum of the North Atlantic into the Polar area, as complementary to the outflow of its *deeper* stratum,—has been led by a careful investigation of all accessible data as to the volume, temperature, and rate of movement of the *true* Gulf Stream in various parts of its course, to adopt the view previously advocated by Mr. Findlay, and accepted by Sir John Herschel and Admiral Irminger (of the Danish navy), that the Florida Current—which gradually spreads itself out like a fan, diminishing

in depth as it increases in extent—is practically broken up and dispersed in the Mid-Atlantic, not long after passing the banks of Newfoundland; so that if any of its extensions really reach our shores, they bring with them little or no warmth. Even at its deepest and strongest, this powerful current loses 15° of surface-temperature during its 'winter passage to the longitude of Nova Scotia, which occupies from forty to fifty days. And when it reaches the banks of Newfoundland, it encounters the Labrador current, with its fleet of icebergs, by which its temperature is still further greatly reduced; and as its superficial area increases, its depth diminishes, so that it becomes less and less able to maintain its temperature against the cooling influence of the air above it. As its rate of movement, where it is last recognisable as a current, is so reduced, that at least 100 days must be occupied in its passage from the banks of Newfoundland to the Land's End, it is scarcely to be conceived that a thinned-out surface layer of only fifty fathoms' depth, should do otherwise than follow the temperature of the atmosphere above it, as the thin superheated layer of the Mediterranean most certainly does. The continuance of its north-east movement as a surface-drift, bearing with it trunks of tropical trees, fruits, floating shells, &c., is fully accounted for by the prevalence of south-west winds over that portion of the Atlantic, which land these products on the shores it washes. Further, of that *outside* reflection of the Equatorial current which is included by Professor Wyville Thomson under the term Gulf Stream, the main body appears to cross the Atlantic near the parallel of the Azores, and to turn southwards when it has passed them, being drawn back as a 'supply-current' towards the sources of the Equatorial; and this seems to be the final destination of the greater part of the Florida current itself; only one small branch of it being occasionally recognisable in the Bay of Biscay as Rennel's current, while two other narrow bands can be distinguished by their somewhat higher temperature, one between the Shetland and the Faroe Isles, and the other between the Faroes and Iceland.

The real heater of North-western Europe, according to Dr. Carpenter, is the stratum of 600 or 700 fathoms depth, which, as

already mentioned, he has traced northwards by continuity of temperature from the coast of Portugal to the Faroe banks, and the movement of which he attributes to a *vis a fronte*, or indraught, resulting from the continual descent, in the Polar area, of the water whose temperature has been brought down by surface-cold,—as in the experimental illustration, of which his account has been already cited. The surface-temperature of this stratum, in the summer months, follows that of the air, which is generally warmer than itself; but in the winter, when the temperature of the air falls below that of the sub-surface stratum, each surface-film, as it is cooled and descends, will be replaced by warmer water from below; and thus, as Dr. Carpenter points out, a deep moderately-warm stratum becomes a much more potent heat-carrier than a mere surface-layer of superheated water. Hence it is the 700 fathoms' depth, in the North Atlantic, of the stratum having a temperature above 45° , which gives to this slow-moving mass its special calorific power. In corresponding latitudes of the South Atlantic, on the other hand, the stratum exceeding 45° of temperature is not more than 300 fathoms deep; so that if this stratum be moving towards the South Pole, its power of ameliorating the Antarctic climate will be much inferior. To whatever extent, therefore, the greater depth of the stratum above 45° in the North Atlantic is due to the prolongation into it of the Equatorial current (a matter still open to investigation), to that extent Dr. Carpenter admits our obligation to it; but he argues that a cause for its northward flow must be sought somewhere else than in the original *vis a tergo* of the horizontal circulation, which will tend, if not exhausted, to bring it back to its source; and that this cause is to be found in the *vis a fronte* of the vertical circulation, of which the *primum mobile* is Polar Cold.

The decision of this question will ultimately rest mainly on the temperature-phenomena of high southern latitudes, to which no Gulf Stream brings warm water from an Equatorial source; and as the *Challenger* was ordered (at Dr. Carpenter's special instance) to run due south from Kerguelen's Land, so as to approach the great ice-barrier of the Antarctic as nearly as may be deemed expedient, and as we have already heard from Melbourne that

she has done, we shall learn ere long whether the upper stratum of the Southern Ocean is really travelling Polewards, as on Dr. Carpenter's theory it ought to do, and as the slow southerly 'set' noticed by several Antarctic navigators would seem to indicate that it does. In the mean time, however, we may notice that a remarkable confirmation of Dr. Carpenter's doctrine of a continual upward movement of water in the Equatorial zone, from the bottom towards the surface, is afforded by the *Challenger* observations. For this ascent is indicated, not only by the remarkable approach of the isotherm of 40° to within 300 fathoms at the Equator, but also by the marked reduction of the salinity of the surface-water which is there encountered. For the *Challenger* observations, confirming others previously made, show that the specific gravity of surface-water (allowance for temperature being duly made) falls within the Tropics from an average of 1027.3 to an average of 1026.3; and that this reduced salinity corresponds exactly with that of the low salinity of the Polar water which is traceable over the sea-bed even into the Equatorial area.

It is obvious that such a continual ascent of glacial water towards the surface, must have a moderating effect upon the surface-temperature of the Equatorial zone; and it seems to us that this doctrine of a *vertical* oceanic circulation affords an adequate *rationale* of the fact, that the surface-temperature of the deep ocean seems never to rise much above 80° , even where (as under the Equator) it is constantly exposed to the most powerful insolation. In the Mediterranean and the Red Sea, in which there is, *ex hypothesi*, no such upward movement, the surface-temperature is proportionally much higher; that of the Mediterranean in Lat. 35° being nearly equal in September to that of the Equatorial Atlantic in the same month, and that of the Red Sea rising to 92° . So also, along the Guinea Coast, where the depth is not great enough to admit the glacial underflow, the surface-temperature sometimes rises as high as 90° . Thus it appears that this general Oceanic Circulation exerts as important an influence in *moderating Tropical heat*, as in tempering Polar cold.

That the constantly-renewed disturbance of Equilibrium produced by difference of Temperature, is adequate to maintain such

a slow *vertical* oceanic circulation as Dr. Carpenter contends for, seems now established by the proved existence of decided *under-currents* in the Gibraltar and Black Sea Straits, which are pretty clearly maintained by slight differences of downward and therefore lateral pressure between equal columns at the two extremities of each strait. In the case of the Gibraltar currents, the superficial indraught of Atlantic water into the Mediterranean serves to keep up the level of that great inland sea, which would otherwise be lowered by excessive evaporation.* But this indraught, which replaces by salt water what has passed off as fresh, would produce a progressive accumulation of salt in the Mediterranean basin, if it were not compensated by an under-current in the opposite direction, which carries out as much salt as the surface-current brings in; and the maintaining power of this under-current, which sometimes runs at the rate of a mile and a half per hour, is the excess of the average specific gravity of Mediterranean water, which may be taken as 1029, over that of Atlantic water, which may be taken as 1027.3.—The case is still more striking, however, in regard to the currents of the Dardanelles and the Bosphorus, where the conditions are reversed, and the difference in density between the columns is greater. For in consequence of the excess of fresh water brought down by the great rivers which discharge themselves into the Black Sea, above the loss by evaporation from its surface, there is generally an *outward* upper-current,—which, however, owes part of its force to wind,—setting first into the sea of Marmora, and thence into the *Ægean*. Now the salinity of Black Sea water is reduced by the excessive influx of fresh water, to less than half that of the Mediterranean; its specific gravity usually varying between 1012 and 1014, according to the season. And it was argued by Dr. Carpenter that, alike on *à priori* and *à posteriori* grounds, there *must* be a powerful inward under-current: since the great excess of lateral pressure at the outer end of each Strait would necessarily drive inwards the lower stratum of its water; while the salt, if not thus continually returned, would

* See Dr. Carpenter's Paper 'On the Physical Conditions of Inland Seas,' in *The Contemporary Review*, vol. xxii., p. 386.

be gradually altogether washed out of the Black Sea basin. To this it was replied by Captain Spratt, who had surveyed these Straits some years ago, and who strongly opposed the whole under-current doctrine, *first*, that he had ascertained their bottom-water to be stationary, and *second*, that the salt which passes *outwards* during a large proportion of the year, is carried *inwards* again during the winter months, when the Black Sea rivers are low, and the wind sets to the North-east, instead of *from* it as at other times. Having reason, however, to distrust the accuracy of Captain Spratt's conclusion, as well from an examination of his own record of his experiments, as from local information which was strongly corroborative of the existence of an under-current, Dr. Carpenter requested the Hydrographer to the Admiralty to direct that a re-examination of this question should be made by the surveying staff of the *Shearwater*, which was about to proceed to that station; and the result was, that most unequivocal evidence was obtained of the existence of an inward under-current, of which the strength is proportional to that of the outward upper-current; being greatest when the latter is impelled by a north-east wind, which, by lowering the interior and raising the exterior level, will increase the preponderance of the outer column over the inner. When the *outward* surface-current was running at the rate of from three to four knots an hour, the buoy from which the current-drag was suspended in the deeper stratum was carried *inwards* by its movement, at a rate greater than that at which any row-boat could keep up with it; so that the apparatus would have been lost, if the steam-launch of the *Shearwater* had not been able to follow it.

This very striking confirmation of Dr. Carpenter's prediction will probably increase our readers' confidence in the soundness of the general Physical Theory he propounds; which is to the effect that wherever two bodies of water are in connection with each other, constantly differing in downward pressure,—whether in consequence of difference of temperature, excess of evaporation, or inflow of fresh water,—there will be an under-flow from the heavier towards the lighter, which, by lowering the level of the former, will produce a return upper-flow from the lighter towards the heavier. This, as Sir John

Herschel remarked, seems the common-sense of the matter; and it is only because the Gulf Stream has a body of staunch advocates, like Dr. Petermann, Professor Wyville Thomson, and Mr. Croll, who strenuously uphold the exclusive agency of the Trade-winds, that any opposition has been raised to Dr. Carpenter's views. Professor Möhn of Christiania, who wrote a very important Memoir in 1872 to prove the dependence of the peculiar climate of Norway upon the Gulf Stream,—his facts *really* proving its dependence upon the flow of *warm water* to the Norwegian shores,—has since expressed to Dr. Carpenter his conversion to Dr. C.'s doctrine of the cause of that flow. And by Dr. Meyer, who has been for some years engaged in the investigation of the currents of the Baltic (the condition of which, as regards excess of river-supply over evaporation, corresponds with that of the Black Sea), they are unhesitatingly accepted as entirely accounting for the phenomena he has there observed.

In another very important particular do the results of the *Challenger* observations confirm Dr. Carpenter's previously expressed views,—namely, that the *cold band* which intervenes between the Gulf Stream and the Atlantic seaboard of the United States, and which is traceable even along the northern side of the Florida Channel itself, is really produced by the surging-upwards of the polar-equatorial flow which underlies the Gulf Stream, and which, as the temperature-soundings of the United States coast surveyors have shown, even enters the Gulf of Mexico as an under-current flowing inwards beneath the warm outflowing stream. This surging-upwards of the deeper cold strata along the western slope of the Atlantic basin is easily accounted for on dynamical principles, and does, in fact, afford very cogent evidence that the great body of North Atlantic water below (say) 800 fathoms is really moving southwards. It was first pointed out, we believe, by Captain Maury, that the *eastward* tendency of the Gulf Stream, which shows itself more and more as it advances into higher latitudes, is due in great part to the *excess* of easterly momentum which it brings from the intertropical zone, where the earth's rotatory movement is much more rapid than it is half way towards the pole; and this view of the case was fully accepted by Sir John

Herschel. For the same reason, any body of water moving from either Pole towards the Equator will bring from higher to lower latitudes a *deficiency* of easterly momentum, that is to say, it will tend *westwards*; and this tendency will carry it towards the surface, when it meets the slope of the United States seaboard. The correctness of this view has been further confirmed (1) by the fact recently communicated to Dr. Carpenter by Captain St. John, who has lately returned from the survey of the Japan Sea, that a similar cold band intervenes between the Kuro

Siwo and the eastern coast of Japan; and (2) by the results of the inquiries prosecuted in the Baltic and North Sea by Dr. Meyer, who has found distinct evidence of the surging-up of the southward-moving deeper and colder layer on the western slopes of those basins; the temperature of the eastern face of the Dogger Bank being from 10° to 15° lower than that of its western, and a difference of 15° sometimes showing itself within five fathoms of depth.—*British Quarterly Review*.

(To be concluded.)

MR. RUSKIN'S RECENT WRITINGS.

BY LESLIE STEPHEN.

THE world is out of joint. The songs of triumph over peace and progress which were so popular a few years ago have been quenched in gloomy silence. It is difficult even to take up a newspaper without coming upon painful forebodings of the future. Peace has not come down upon the world, and there is more demand for swords than for ploughshares. The nations are glaring at each other distrustfully, muttering ominous threats, and arming themselves to the teeth. Their mechanical skill is absorbed in devising more efficient means of mutual destruction, and the growth of material wealth is scarcely able to support the burden of warlike preparations. The internal politics of states are not much more reassuring than their external relations. If the republic triumphs in France and Spain it is not because reason has supplanted prejudice, but because nobody, except a few Carlisle or Communists, believes enough in any principles to fight for them. In the promised land of political speculators, the government of the country is more and more becoming a mere branch of stockjobbing. Everywhere the division between classes widens instead of narrowing; and the most important phenomenon in recent English politics is that the old social bonds have snapped asunder amongst the classes least accessible to revolutionary impulses. Absorbed in such contests, we fail to attend to matters of the most vital importance. The health of the population is lowered as greater masses are daily collected in huge cities, where all the laws of

sanitary science are studiously disregarded. Everywhere we see a generation growing up sordid, degraded, and devoid of self-respect. The old beauty of life has departed. A laborer is no longer a man who takes a pride in his work and obeys a code of manners appropriate to his station in life. He restlessly aims at aping his superiors, and loses his own solid merits without acquiring their refinement. If the workman has no sense of duty to his employer, the employer forgets in his turn that he has any duty except to grow rich. He complains of the exorbitant demands of his subordinates, and tries to indemnify himself by cheating his equals. What can we expect in art or in literature from such a social order except that which we see? The old spontaneous impulse has departed. Our rising poets and artists are a puny generation who either console themselves for their impotence by masquerading in the clothes of their predecessors or take refuge in a miserable epicureanism which calls all pleasures equally good and prefers those sensual enjoyments which are most suited to stimulate a jaded appetite. Religion is corrupted at the core. With some it is a mere homage to the respectabilities; with others a mere superstition, which claims to be pretty but scarcely dares even to assert that it is true; some revolt against all religious teaching, and others almost openly advocate a belief in lies; everywhere the professed creeds of men are divorced from their really serious speculations.

Those who would apply a remedy to these evils generally take one of two lines: they propose that we should humbly submit to outworn authority, or preach the consoling gospel that if we will let everything systematically alone things will somehow all come right. As if things had not been let alone! When we listen to the pedants and the preachers of the day, can we not sympathise with Shakespeare's weariness

Of art made tongue-tied by authority,
And folly doctor-like controlling skill,
And simple faith miscalled simplicity,
And captive good attending captive ill?

'Tired of all these,' where are we to find consolation? Most of us are content, and perhaps wisely, to work on in our own little spheres and put up with such results as can fall to the share of a solitary unit in this chaotic world. We may reflect, if we please, that there never was a time since the world began at which evil was not rampant and wise men in a small minority; and that somehow or other we have in the American phrase 'worried through' it, and rather improved than otherwise. There are advantages to be set against all the triumphant mischiefs which make wise men cry out, *Vanitas vanitatum!* and enthusiasts may find a bright side to the more ominous phenomena and look forward to that millennium which is always to begin the day after tomorrow. We have cultivated statistics of late, and at least one of our teachers has thought that the new gospel lay in that direction; but we have not yet succeeded in presenting in a tabular form all the good and all the evil which is to be found in the world, and in striking a balance between them. The problem is too complex for most of us; and it may be as well to give it up and, without swaggering over progress or uselessly saddening ourselves over decay, do our best to swell the right side of the account. Most men, however, judge according to temperament. The cheerful philosopher sees in the difference between the actual state of the world and the ideal which he can frame for himself, a guarantee for the approach of a better day. The melancholy philosopher sees in the same contrast a proof of the natural corruption of mankind. He puts the golden age behind instead of before; and, like his rival, attributes to the observation of external

events what is merely the expression of his own character.

No one, at any rate, will deny that the clouds are thick enough to justify many gloomy prognostications. Take a man of unusual if not morbid sensibility, and place him in the midst of the jostling, struggling, unsavory, and unreasonable crowd; suppose him to have a love of all natural and artistic beauty, which is outraged at every moment by the prevailing ugliness; a sincere hatred for all the meanness and imposture too characteristic of modern life; a determination to see things for himself, which involves an antipathy to all the established commonplaces of contented respectability; an eloquence and imaginative force which transfuses his prose with poetry, though his mind is too discursive to express itself in the poetical form; and a keen logical faculty, hampered by a constitutional irritability which prevents his teaching from taking a systematic form; let him give free vent to all the annoyance and the indignation naturally produced by his position, and you will have a general impression of Mr. Ruskin's later writings. One seems almost to be listening to the cries of a man of genius, placed in a pillory to be pelted by a thick-skinned mob, and urged by a sense of his helplessness to utter the bitterest taunts that he can invent. Amongst the weaknesses natural to such a temperament is the disposition to attach an undue value to what other people would describe as crotchets; and amongst Mr. Ruskin's crotchets are certain theories which involve the publication of his works in such a manner as to oppose the greatest obstacles to their circulation.* It is due partly to this cause, and partly to the fact that people do not like to be called rogues, cheats, liars, and hypocrites, that Mr. Ruskin's recent writings, and especially his *Fors Clavigera*, the monthly manifesto in which he denounces modern society, have not received the notice which they deserve. The British public is content to ticket Mr. Ruskin as an oddity, and to pass by with as little attention as possible. And yet the *Fors Clavigera* (the meaning of the title may be found in the second number) would be worth reading if only as a literary curiosity. It is a

* The monthly numbers of Mr. Ruskin's *Fors Clavigera* are to be obtained for the sum of tenpence each on application to Mr. George Allen, Orpington, Sunnyside, Kent.

strange mixture of autobiographical sketches, of vehement denunciation of modern crimes and follies, of keen literary and artistic criticism, of economical controversy, of fanciful etymologies, strained allegories, questionable interpretations of history, and remarks upon things in general, in which passages of great force and beauty are curiously blended with much that, to say the least, is of inferior value, and in which digression is as much the rule as in *Tristram Shandy* or Southey's *Doctor*. Even Mr. Ruskin's disciples seem at times to be a little puzzled by his utterances, and especially by a certain receipt for making a 'Yorkshire Goose Pie,' which suddenly intrudes itself into one of his numbers, and may or may not cover a profound allegory. Nothing would be easier, and nothing would be more superfluous, than to ridicule many of the opinions which he throws out, or to condemn them from the point of view of orthodox science or political economy. It seems to be more desirable to call attention to the strength than to the weakness of teaching opposed to all current opinions, and therefore more sure to be refuted than to gain a fair hearing. When a gentleman begins by informing his readers that he would like to destroy most of the railroads in England and all the railroads in Wales, the new town of Edinburgh, the north suburb of Geneva, and the city of New York, he places himself in a position which is simply bewildering to the ordinary British mind. Without claiming to be an adequate interpreter, and still less an adequate critic, of all his theories, I may venture a few remarks upon some of the characteristic qualities of *Fors* and others of his recent writings.

Mr. Ruskin, as I have said, is at war with modern society. He sometimes expresses himself in language which, but for his own assurances to the contrary, might be taken for the utterance of furious passion rather than calm reflection. 'It seems to be the appointed function of the nineteenth century,' he says, 'to exhibit in all things the elect pattern of perfect folly, for a warning to the furthest future.' The only hope for us is in one of the 'forms of ruin which necessarily cut a nation down to the ground and leave it, thence to sprout again, if there be any life left for it in the earth, or any lesson teachable to it by adversity.' And after informing his Oxford hearers that we are, in the sphere of

art at any rate, 'false and base,' 'absolutely without imagination and without virtue,' he adds that his language is not, as they may fancy, unjustifiably violent, but 'temperate and accurate—except in shortcoming of blame.' Indeed, if Mr. Ruskin's habitual statements be well founded, the world has become well nigh uninhabitable by decent people. Lot would be puzzled to discover a residue of righteous men sufficient to redeem us from speedy destruction. In the preface to a collected edition of his works, he tells us that in his natural temper he has sympathy with Marmontel; in his 'enforced and accidental temper, and thoughts of things and people, with Dean Swift.' No man could make a sadder avowal than is implied in a claim of sympathy with the great man who now rests where his heart is no longer lacerated by *sæva indignatio*. Neither, if one may correct a self-drawn portrait, can the analogy be accepted without many deductions. Swift's misanthropy is very different in quality from Mr. Ruskin's. It is less 'accidental,' and incomparably deeper.

Misanthropy, indeed, is altogether the wrong word to express the temper with which Mr. Ruskin regards the world. He believes in the capacity of men for happiness and purity, though some strange perversity has jarred the whole social order. He can believe in heroes and in unsophisticated human beings, and does not hold that all virtue is a sham, and selfishness and sensuality the only moving forces of the world. Swift's concentrated bitterness indicates a mind in which the very roots of all illusions have been extirpated. Mr. Ruskin can still cherish a faint belief in a possible Utopia, which to the Dean would have appeared to be a silly dream, worthy of the philosophers of Laputa. The more masculine character of Swift's mind makes him capable of accepting a view of the world which helped to drive even him mad, and which would have been simply intolerable to a man of more delicate fibre. Some light must be admitted to the horizon, or refuge would have to be sought in the cultivation of sheer cynical insensibility. Mr. Ruskin has not descended to those awful depths, and we should have been more inclined to compare his protest against modern life with the protest of Rousseau. The old-fashioned declamations against luxury may

be easily translated into Mr. Ruskin's language about the modern worship of wealth; and if he does not talk about an ideal 'state of nature,' he is equally anxious to meet corruption by returning to a simpler order of society. Both writers would oppose the simple and healthy life of a primitive population of peasants to the demoralised and disorganised masses of our great towns. Mr. Ruskin finds his 'ideal of felicity actually produced in the Tyrol.' There, a few years ago, he met 'as merry and round a person' as he ever desires to see: 'he was tidily dressed, not in brown rags, but in green velveteen; he wore a jaunty hat, with a feather in it, a little on one side; he was not drunk, but the effervescence of his thorough good humor filled the room all about him; and he could sing like a robin.' Many travellers who have seen such a phenomenon, and mentally compared him with the British agricultural laborer, whose grievances are slowly becoming articulate, must have had some searchings of heart as to the advantages of the modern civilisation. Is the poor cramped population of our fields, or the brutal population which heaves half-bricks at strangers in the mining districts, or the effete population which skulks about back slums and our casual wards, the kind of human article naturally turned out by our manufacturing and commercial industry?

The problem about which all manner of Social Science Associations have been puzzling themselves for a great many years essentially comes to this; and Mr. Ruskin answers it passionately enough. The sight and the sound of all the evils which affect the world is too much for him. 'I am not,' he says, 'an unselfish person nor an evangelical one; I have no particular pleasure in doing good, nor do I dislike doing it so much as to expect to be rewarded for it in another world. But I simply cannot paint, nor read, nor look at minerals, nor do anything else that I like, and the very light of the morning sky, when there is any—which is seldom now-a-days near London—has become hateful to me, because of the misery which I know of and see signs of when I know it not, which no imagination can interpret too bitterly.' There is evil enough under the sun to justify any fierceness of indignation; and we should be less disposed to quarrel with Mr. Ruskin for cherishing his anger than

for squandering so valuable an article so rashly. He suffers from a kind of mental incontinence which weakens the force of his writing. He strikes at evil too fiercely and rapidly to strike effectually. He wrote the *Modern Painters*, as he tells us in a characteristic preface to the last edition, not from love of fame, for then he would have compressed his writing, nor from love of immediate popularity, for then he would have given fine words instead of solid thought, but simply because he could not help it. He saw an injustice being done, and could not help flying straight in the faces of the evildoers. It is easy to reply that he ought to have helped it. In that case the book might have become a symmetrical whole instead of being only what it is—the book which, in spite of incoherence and utter absence of concentration, has done more than any other of its kind to stimulate thought and disperse antiquated fallacies. But we must take Mr. Ruskin as he is. He might, perhaps, have been a leader; he is content to be a brilliant partisan in a random guerilla warfare, and therefore to win partial victories, to disgust many people whom he might have conciliated, and to consort with all manner of superficial and untrained schemers, instead of taking part in more systematic operations. Nobody is more sensible than Mr. Ruskin of the value of discipline, order, and subordination. Unfortunately the ideas of every existing party happen to be fundamentally wrong, and he is therefore obliged in spite of himself to fight for his own hand.

Men who revolt against the world in this unqualified fashion are generally subject to two imputations. They are eccentric by definition; and their eccentricity is generally complicated by sentimentalism. They are, it is suggested, under the dominion of an excessive sensibility which bursts all restraints of logic and common sense. The worst of all qualifications for fighting the world is to be so thin-skinned as to be unable to accept compromise or to submit contentedly to inevitable evils. In Mr. Ruskin's case, it is suggested, the foundation of this exaggerated tone of feeling is to be found in his exquisite sense of the beautiful. He always looks upon the world more or less from an artistic point of view. Whatever may be our other claims to superiority over our ancestors, nobody can deny that the world has be-

come ugly. We may be more scientific than the ancient Greeks; but we are undoubtedly mere children to them in art, or, rather, mere decrepit and effete old men. We could no more build a Parthenon or make a statue fit to be set by the Elgin marbles, than they could build ironclads or solve problems by modern methods of mathematical analysis. Indeed, our superiority in any case is not a superiority of faculty, but simply of inherited results. And thus, if the artistic capacities of a race be the fair measure of its general excellence; that which we call progress should really be called decay. Our eyes have grown dim, and our hands have lost their cunning. Mere mechanical dexterity is but a poor thing to set against the unerring instinct which in old days guided alike the humblest workman and the most cultivated artist. The point at issue appears in one of Mr. Ruskin's controversies. According to the *Spectator*, Mr. Ruskin wished the country to become poor in order that it might thrive in an artistic sense. 'If,' it said, 'we must choose between a Titian and a Lancashire cotton-mill, then in the name of manhood and of morality give us the cotton-mill;' and it proceeded to add that only 'the dilettantism of the studio' would make a different choice. Mr. Ruskin, that is, is an effeminate person who has so fallen in love with the glories of Venetian coloring and Greek sculpture that he would summarily sweep away all that makes men comfortable to give them a chance of recovering the lost power. Let us burn our mills, close our coal-mines, and tear up our railways, and perhaps we may learn in time to paint a few decently good pictures. Nobody in whom the artistic faculties had not been cultivated till the whole moral fibre was softened would buy good art at such a sacrifice.

Up to a certain point, I imagine that Mr. Ruskin would accept the statement. He does prefer Titians to cotton-mills, and he does think that the possession of cotton-mills is incompatible with the production of Titians. He hates machinery as an artist; he hates the mechanical repetition of vulgar forms, whether in architecture or 'dry goods,' which takes the place of the old work where every form speaks of a living hand and eye behind it. He hates steamboats because they come puffing and screaming, and sending their whistles through his head like a knife when he is

meditating on the loveliness of a picture in the once silent Venice. He hates railways because they destroy all natural beauty. There was once a rocky valley between Buxton and Bakewell, where you might have seen Apollo and the Muses 'walking in fair procession on the lawns of it, and to and fro among the pinnacles of its crags.' But you—the stupid British public, to wit—thought that you could make money of it; 'you enterprised a railroad through the valley—you blasted its rocks away, heaped thousands of tons of shale into its lovely stream. The valley is gone, and the gods with it; and now, every fool in Buxton can be at Bakewell in half an hour, and every fool in Bakewell at Buxton; which you think a lucrative process of exchange; you fools everywhere.' The beauty of English landscape is everywhere defaced by coal-smoke, and the purity of English streams defiled by refuse. Meanwhile the perfection of the mechanical contrivance which passes for art in England is typified by an ingenious performance ticketed 'No. 1' in the South Kensington Museum. It is a statue in black and white marble of a Newfoundland dog, which Mr. Ruskin pronounces to be, accurately speaking, the 'most perfectly and roundly ill-done thing' which he has ever seen produced in art. Its makers had seen 'Roman work and Florentine work and Byzantine work and Gothic work; and misunderstanding of everything had passed through them as the mud does through earthworms, and here at last was their wormcast of a production.' Mere mechanical dexterity has absolutely supplanted artistic skill.

Well, you reply, we must take the good with the bad. We give up the Newfoundland dog; but if steam-whistles go through your head in Venice, and the railway drives the gods from Derbyshire, you must remember that a number of poor Englishmen and Italians, who never cared much for scenery or for pictures, enjoy a common-place pleasure which they must else have gone without. Increased command of the natural forces means increased comfort to millions at the cost of a little sentimental enjoyment for thousands. But it is precisely here that Mr. Ruskin would join issue with the optimists. The lesson which he has preached most industriously and most eloquently is the essential connection between good art and sound mo-

reality. The first condition of producing good pictures or statues is to be pure, sincere, and innocent. Milton's saying that a man who would write a heroic poem must make his life a heroic poem, is the secret of all artistic excellence. A nation which is content with shams in art will put up with shams in its religious or political or industrial life. We bedaub our flimsy walls with stucco as our statesmen hide their insincerity under platitude. If a people is vile at heart, the persons who minister to its taste will write degraded poetry and perform demoralising plays, and paint pictures which would revolt the pure-minded. The impudent avowal that the spheres of art and morality should be separate is simply an acceptance of a debased condition of art. And therefore Mr. Ruskin's lectures upon art are apt to pass into moral or religious discourses, as in works professedly dealing with social questions he is apt to regard the artistic test as final. The fact that we cannot produce Titians is a conclusive proof that we must have lost the moral qualities which made a Titian possible; whilst the fact that we can produce a cotton-mill merely shows that we can cheat our customers, and make rubbish on a gigantic scale. An indefinite facility in the multiplication of shoddy is not a matter for exulting self-congratulation. The ugliness of modern life is not due to the disarrangement of certain distinct æsthetic faculties, but the necessary mark of moral insensibility. Cruelty and covetousness are the dominant vices of modern society; and if they have ruined our powers of expression, it is only because they have first corrupted the sentiments which should be expressed in noble art.

The problem is probably more complex than Mr. Ruskin is apt to assume. The attempt to divorce art from morality is indeed as illogical and as mischievous as he assumes. The greater the talent which is prostituted to express base thoughts and gratify prurient tastes, the more it should excite our disgust; and the talent so misused will die out amongst a race which neglects the laws of morality, or, in other words, the primary conditions of physical and spiritual health. The literature of a corrupt race becomes not only immoral but stupid. And yet the art test is not quite so satisfactory as Mr. Ruskin seems at times to assume. Utter insensibility to beauty and the calmest acquiescence in all

manner of ugliness is not incompatible with morality amongst individuals; or what would become of the dissenters? Hymns which torture a musical ear may express very sincere religious emotion. Of course, we are above the Puritan prejudice which regarded all art as more or less the work of the Devil; but perhaps we are not, and even the really artistic races were not, much better than the Puritans. Indeed, we should take but a sad view of the world if we held that its artistic attainments always measured the moral worth of a nation. No phenomenon in history is more curious than the shortness of the periods during which art has attained any high degree of perfection. There have been only two brief periods, says Mr. Ruskin, in which men could really make first-rate statues, and even then the knowledge was confined to two very small districts. But if our inferiority in that direction to the Greek and the Florentine artists proves that we are equally inferior in a moral sense, we must suppose that virtue is a plant which flowers but once in a thousand years. Probably students of history would agree that virtue was more evenly, and artistic excellence more unevenly, distributed than we should have conceived possible. Many conditions, not hitherto determined by social philosophers, go to producing this rarest of qualities; and Mr. Ruskin seems often to exaggerate from a tacit assumption that men who cannot paint or carve must necessarily be incapable of speaking the truth, or revering love and purity.

Yet it is not to be denied that the test, when applied with due precaution, may reveal much of the moral character of a nation. The imbecility of our artistic efforts is the index of an unloveliness which infects the national life. We cannot make good music because there is a want of harmony in our creeds, and a constant jarring between the various elements of society. Mr. Ruskin's criticisms of modern society are forcible, though he reasons too much from single cases. The shock which he receives from particular incidents seems to throw him off his balance. He practises the art of saying stinging things, of which the essence is to make particular charges which we feel to be true, whilst we are convinced that the tacit generalisation is unfair. The whistle of the steamboat in Venice sets up such a

condition of nervous irritability, that the whole world seems to be filled with its discordant strains. Mr. Ruskin saw one day a well-dressed little boy leaning over Wallingford Bridge, and fancied that he was looking at some pretty bird or insect. Coming up to him, the little boy suddenly crossed the bridge, and took up the same attitude at the opposite parapet; his purpose was to spit from both sides upon the heads of a pleasure party in a passing boat. 'The incident may seem to you trivial,' says Mr. Ruskin to his hearers; and, in fact, most persons would have been content to box the little boy's ears, and possibly would have consoled themselves with the reflection that, at least, spitting upon Jewish gaberdines is no longer permitted by the police. Mr. Ruskin sees in it a proof of that absence of all due social subordination and all grace of behavior, which 'leaves the insolent spirit and degraded senses to find their only occupation in malice, and their only satisfaction in shame.' If the moral be rather too wide for this living fable, Mr. Ruskin has no difficulty in proving from other cases how deeply the ugliness of modern life is rooted in moral insensibility. Here is another spitting scene. As he is drawing the Duomo at Pisa, Mr. Ruskin sees three fellows in rags leaning against the Leaning Tower, and 'expectorating loudly and copiously, at intervals of half a minute each, over the white marble base of it, which they evidently conceived to have been constructed only to be spit upon.' Is their brutality out of harmony with the lessons taught by their superiors? There is or was a lovely little chapel at Pisa, built for a shrine, seen by the boatmen as they first rose on the surge of the open sea, and bared their heads for a short prayer. In 1840 Mr. Ruskin painted it, when six hundred and ten years had left it perfect; only giving the marble a tempered glow, or touching the sculpture with a softer shade. In a quarter of a century the Italians have grown wiser, and Mr. Ruskin watched a workman calmly striking the old marble cross to pieces. Tourists are supposed to be more appreciative, and Mr. Ruskin travelled to Verona in a railway carriage with two American girls, specimens of the utmost result of the training of the most progressive race in the world. They were travelling through exquisite midsummer

sunshine, and the range of Alps was clear from the Lake of Garda to Cadore. But the two American girls had reduced themselves simply to two 'white pieces of putty that could feel pain;' from Venice to Verona they perceived nothing but flies and dust. They read French novels, sucked lemons and sugar, and their whole conversation as to scenery was at a station where the blinds had been drawn up. 'Don't those snow-caps make you cool?' 'No; I wish they did.' Meanwhile, at Rome, the slope of the Aventine, where the wall of Tullus has just been laid bare in perfect preservation, is being sold on building leases. New houses, that is, will be run up by bad workmen, who know nothing of art, and only care for money-making; and whilst 'the last vestiges of the heroic works of the Roman monarchy are being destroyed, the base fresco-painting of the worst times of the Empire is being faithfully copied, with perfectly true lascivious instinct, for interior decoration.' Lust and vanity are the real moving powers in all this Italian movement. Are we much better in England? Mr. Ruskin was waiting a short time ago at the Furness station, which is so tastefully placed as to be the only object visible over the ruined altar of the Abbey. To him entered a party of workmen who had been refreshing themselves at a tavern established by the Abbot's Chapel. They were dressed in brown rags, smoking pipes, all more or less drunk, and taking very long steps to keep their balance in the direction of motion, whilst laterally securing themselves by hustling the wall or any chance passengers. Such men, as Mr. Ruskin's friend explained to him, would get drunk and would not admire the Abbey; they were not only unmanageable, but implied 'the existence of many unmanageable persons before and after them—nay, a long ancestral and filial unmanageableness. They were a fallen race, every way incapable, as I acutely felt, of appreciating the beauty of *Modern Painters*, or fathoming the significance of *Fors Clavigera*.' What are the amusements and thoughts of such a race, or even of the superior social layers? Go to Margate, a place memorable to Mr. Ruskin for the singular loveliness of its skies; and you may see—or newspaper correspondents exaggerate—a ruffianly crowd insulting the passengers who arrive by steamboat with the most obscene lan-

guage or bathing with revolting indecency in a promiscuous crowd; or to Glasgow, and you will see the Clyde turned into a loathsome and stagnant ditch, whilst the poor Glaswegians fancy that they can import learning into their town in a Gothic case, costing 150,000*l.*, which is about as wise as to 'put a pyx into a pigsty to make the pigs pious.' Or take a walk in the London suburbs. There was once a secluded district with old country-houses, and neatly kept cottages with tiled foot-paths and porches covered with honeysuckle. Now it is covered with thousands of semi-detached villas built of rotten brick, held together by iron devices. What are the people who inhabit them? The men can write and cast accounts; they make their living by it. The women read story books, dance in a vulgar manner, and play vulgar tunes on the piano; they know nothing of any fine art; they read one magazine on Sundays and another on weekdays, and know nothing of any other literature. They never take a walk; they cannot garden; the women wear false hair and copy the fashions of Parisian prostitutes; the men have no intellects but for cheating, no pleasures except smoking and eating, and 'no ideas or any capacity of forming ideas of anything that has yet been done of great or seen of good in this world.'

Truly, this is a lamentable picture, which we may, if we please, set down as wanton caricature or as a proof that poor Mr. Ruskin is but speaking the truth when he tells us, pathetically enough, of his constant sadness, and declares that he is nearly always out of humor. The exaggeration is to be lamented, because it lessens the force of his criticism. The remark inevitably suggests itself that a fair estimate of modern civilization is hardly to be obtained by the process of cutting out of our newspapers every instance of modern brutality which can be found in police reports, and setting them against the most heroic deeds or thoughts of older times. Bill Sykes may be a greater brute than the Black Prince; but there were Bill Sykeses in the days of the Black Prince, and perhaps a piece of one in the Black Prince himself. Mr. Ruskin, to speak logically, is a little too fond of the induction by simple enumeration in dealing with historical problems. The sinking of the *London* does not prove con-

clusively that the Athenians built more trustworthy ships than Englishmen; and his declamations against the folly and wickedness of modern war, true enough in themselves, cannot make us forget all the massacres, the persecutions, the kidnappings, the sellings into slavery, the sacks of cities, and the laying waste of provinces, of good old times, nor convince us that Grant or Moltke are responsible for worse atrocities than mediæval or classical generals. The complex question of the moral value of different civilisations is not to be settled off-hand by quoting all the striking instances which an acute intellect combined with a fervid imagination and disturbed by an excessive irritability can accumulate in proof of human weakness. The brute survives in us, it is true, but isolated facts do not prove him to be more rampant than of old.

To argue the question, however, would take me far beyond my limits and my knowledge. Rather let us admit at once that Mr. Ruskin has laid his hand upon ugly symptoms. We will not be angry with the physician because he takes too gloomy a view of them, but be grateful to anybody who will expose the evil unsparingly. A pessimist is perhaps, in the long run, more useful than an optimist. The disease exists, whether we think of it as a temporary disorder caused by an unequal development, or as a spreading cancer, threatening a complete dissolution of the organism. Modern society may be passing through a grave crisis to a higher condition, or may be hastening to a catastrophe like that which overwhelmed the ancient world. It is in any case plain enough that the old will not gradually melt into the new, in spite of all the entreaties of epicurean philosophers, but will have to pass through spasms and dangerous convulsions. The incapacity to paint pretty pictures, to which we might submit with tolerable resignation, is indeed a proof of a wide-spread discord, which sometimes seems to threaten the abrupt dislocation of the strongest bonds. Can we explain the cause of the evil in order to apply such remedies as are in our power?

And here I come to that part of Mr. Ruskin's teaching which, to my mind, is the most unfortunate. There is a mod-

ern gospel which shows, as he thinks, plain traces of diabolic origin. His general view may be sufficiently indicated by the statement that he utterly abjures Mr. Mill's *Liberty*, and holds Mr. Carlyle to be the one true teacher of modern times. But Mr. Ruskin carries his teaching further. The pet objects of his antipathy are the political economists. He believes that his own writings on political economy are incomparably the greatest service which he has rendered to mankind, and to establish his own system is to annihilate Ricardo, Mill, and Professor Fawcett. To give any fair account of his views would be to go too far into a very profitless discussion. This much, however, I must venture to say. Mr. Ruskin's polemics against the economists on their own ground appear to me to imply a series of misconceptions. He is, for example, very fond of attacking a doctrine, fully explained (as I should say, demonstrated) by Mr. Mill, that demand for commodities is not demand for labor. I confess that I am unable to understand the reasons of his indignation against this unfortunate theorem; and the more so because it seems to me to be at once the most moral doctrine of political economy, and that which Mr. Ruskin should be most anxious to establish. It is simply the right answer to that most enduring fallacy that a rich man benefits his neighbors by profligate luxury. Mandeville's sophistry reappears in Protean shapes to the present day. People still maintain in substance that a man supports the poor as well as pleases himself by spending money on his own personal enjoyment. In this form, indeed, Mr. Ruskin accepts the sound doctrine; but when clothed in the technical language of economists, it seems to act upon him like the proverbial red rag. He is always flying at it and denouncing the palpable blunders of men whose reputation for logical clearness is certainly as good as his own. His indignation seems to blind him, and is the source of a series of questionable statements, which I cannot here attempt to unravel. His attack upon the economists is thus diverted into an unfortunate direction. Political economy is, or ought to be, an accurate description of the actual phenomena of the industrial organization of

society. It assumes that, as a matter of fact, the great moving force is competition; and traces amongst men the various consequences of that struggle for existence of which Mr. Darwin has described certain results amongst animals. The complex machinery of trade has been developed out of the savage simplicity by internal pressure, much as species on the Darwinian hypothesis have been developed out of more homogeneous races. Now, it is perfectly open for anybody to say that the conditions thus produced are unfavorable to morality at the present day, and that we should look forward to organising society on different principles. If Mr. Ruskin had said so much, he would have found allies instead of enemies amongst the best political economists. Mr. Mill agrees, for instance, with Comte, and therefore with Mr. Ruskin, that in a perfectly satisfactory social state capitalists would consider themselves as trustees for public benefit of the wealth at their disposal. They would be captains in an industrial army, and be no more governed by the desire of profit than a general by a desire for prize-money. To bring about such a state of things requires a cultivation of the 'altruistic' impulses, which must be the work of many generations to come. But Mr. Ruskin in his wrath attributes to all economists the vulgar interpretation of their doctrines. He calmly assumes that political economists regard their own science as a body of 'directions for the gaining of wealth, irrespectively of the consideration of its moral sources.' He supposes that they deny that wages can be regulated otherwise than by competition, because they assert that wages are so regulated at present; and that they consider all desires to be equally good because they begin by studying the phenomena of demand and supply without at the same moment considering the moral tendencies implied. He supposes that because, for certain purposes, a thinker abstracts from moral considerations, he denies that moral considerations have any weight. He might as well say that physiology consists of directions for growing fat, or that it is wrong to study the laws of nutrition because they show how poisons may be assimilated as well as good food. Mr.

Ruskin's wrath, indeed, is not thrown away, for there are plenty of popular doctrines about political economy which deserve all that he can say against them. I never read a passage in which reference is made to the 'inexorable laws of supply and demand,' or to 'economic science,' without preparing myself to encounter a sophistry, and probably an immoral sophistry. To regard the existing order of things as final, and as imposed by irresistible and unalterable conditions, is foolish as well as wrong. The shrewder the blows which Mr. Ruskin can aim at the doctrines that life is to be always a selfish struggle, that adulteration is only a 'form of competition,' that the only remedy for dishonesty is to let people cheat each other till they are tired of it, the better; and I only regret the exaggeration which enables his antagonist to charge him with unfairness. But the misfortune is this. On that which I take to be the right theory of political economy, the supposed 'inexorable laws' do not, indeed, describe the action of forces as eternal and unalterable as gravitation; but they do describe a certain stage of social development through which we must pass on our road to the millennium. To cast aside the whole existing organisation as useless and corrupt is, in the first place, to attempt a Quixotic tilt against windmills, and, in the next place, to deny the existence of the good elements which exist, and are capable of healthy growth. The problem is not to do without all our machinery, whether of the material or of the human kind, but to assign to it its proper place. Mr. Ruskin once said to a minister, who was lamenting the wickedness in our great cities, 'Well, then, you must not have large cities.' 'That,' replied his friend, 'is an utterly unpractical saying,' and I confess that I think the minister was in the right.

Mr. Ruskin, however, is too impatient or too thoroughgoing to accept any compromise with the evil thing. Covetousness, he thinks, is at the root of all modern evils; our current political economy is but the gospel of covetousness; our social forms are merely the external embodiment of our spirit; and our science the servant of our grovelling materialism. We have proved the sun to be 'a splendidly permanent railroad acci-

dent,' and ourselves to be the descendants of monkeys; but we have become blind to the true light from heaven. Away with the whole of the detestable fabric founded in sin, and serving only to shelter misery and cruelty! Before Mr. Ruskin's imagination there has risen a picture of a new society, which shall spring from the ashes of the old, and for which he will do his best to secure some partial realisation. He has begun to raise a fund, chiefly by his own contributions, and has already bought a piece of land. These members of the St. George's Company—that is to be the name of the future community—will lead pure and simple lives. They will cultivate the land by manual labor, instead of 'huzzing and mazing the blessed fields with the Devil's own team'; the workmen shall be paid fixed wages; the boys shall learn to ride and sail; the girls to spin, weave, sew, and 'cook all ordinary food exquisitely'; they shall all know how to sing and be taught mercy to brutes, courtesy to each other, rigid truth-speaking, and strict obedience. And they shall all learn Latin, and the history of five cities, Athens, Rome, Venice, Florence, and London. Leading 'contented lives, in pure air, out of the way of unsightly objects, and emancipated from unnecessary mechanical occupation,' the little community will possess the first conditions for the cultivation of the great arts; for great art is the expression of a harmonious, noble, and simple society. Let us wish Mr. Ruskin all success; and yet the path he is taking is strewn with too many failures to suggest much hopefulness—even, we fear, to himself. Utopia is not to be gained at a bound; and there will be some trouble in finding appropriate colonists, to say nothing of competent leaders. The ambition is honorable, but one who takes so melancholy a view of modern society as Mr. Ruskin must fear lest the sons of Belial should be too strong for him. We say that truth must prevail, and that all good work lasts. Some of us may believe it, but how can those believe it who see in all past history nothing but a record of dismal failures, of arts flourishing only to decay, and religions rising to be corrupted almost at their source?

What Mr. Ruskin thinks of such mat-

ters is perhaps given most forcibly in a singularly eloquent and pathetic lecture, delivered at Dublin, and republished in the first volume of his collected works. The subject is the *Mystery of Life and its Arts*, and it is a comment on the melancholy text, 'What is your life? It is even as a vapor that appeareth for a little time and then vanisheth away.' That truth, which we all have to learn, has been taught to Mr. Ruskin as to others by bitter personal experience. He speaks a little too mournfully, as it may seem to his readers, of his own failures in life. For ten years he tried to make his countrymen understand Turner, and they will not even look at the pictures exhibited in the public galleries. He then labored more prudently at teaching architecture, and found much sympathy; but the luxury, the mechanism, and the squalid misery of English cities choked the impulse; and he turned from streets of iron and palaces of crystal to the carving of the mountains and the color of the flower. And still, he says, he could tell of repeated failure; for, indeed, who may not tell of failure who thinks that the seeds sown upon stubborn and weed-choked soil are at once to develop into perfect plants? The failure, however, whether exaggerated or real, made the mystery of life deeper. All enduring success, he says, arises from a faith in human nature or a belief in immortality; and his own failure was due to a want of sufficiently earnest effort to understand existence or of purpose to apply his knowledge. But the reflection suggested a stranger mystery. The arts prosper only when endeavoring to proclaim Divine truth; and yet they have always failed to proclaim it. Always at their very culminating point they have become 'ministers to lust and pride.' And we, the hearers, are as apathetic as the teachers. We listen as in a languid dream and care nothing for the revelation that comes. We profess to believe that men are dropping into hell before our faces or rising into heaven; and we don't much care about it, or quite make up our minds one way or the other. Go to the highest and most earnest of religious poets. Milton evidently does not believe his own fictions, consciously adapted from heathen writers; Dante

sees a vision of far more intensity; but it is still a vision only; a vision full of grotesque types and fancies, where the doctrines of the Christian Church become subordinate to the praise, and are only to be understood by the help, of a Florentine maiden. Or take men still greater because raised above controversy and strife. What have Homer and Shakespeare to tell us of the meaning of the world? Both of them think of men as the playthings of a mad destiny, where the noblest passions are the means of bringing their heroes to helpless ruin. The Christian poet differs from the heathen chiefly in this, that he recognises no gods nigh at hand, and that by a petty chance the strongest and most righteous perish without a word of hope. And meanwhile, the wise men of the earth, the statesmen and the merchants, can only tell us to cut each other's throats, or to spend our whole energies in heaping up useless wealth. Turn from the wise men to the humble workers, and we learn a lesson of a kind. The lesson is mainly the old and simple taught in various forms by many men who have felt the painful weight of the great riddle too much for them, that we are to work and hold our tongues. All art consists in the effort to bring a little more order out of chaos; and the sense of failure and imperfection is necessary to stimulate us to the work. Whatever happiness is to be obtained is found in the struggle against disorder. And yet what has been effected by all the past generations of man? The first of human arts is agriculture, and yet there are unreclaimed deserts in the Alps, the very centre of Europe, which could be redeemed by a year's labor, and which still blast their inhabitants into idiocy. And in India (Mr. Ruskin was referring to the Orissa famine) half a million of people died of hunger, and we could not bring them a few grains of rice. Clothing is the next of the arts, and yet how many of us are even decently clad? And of building, the art which leaves the most enduring remains, nothing is left of the greatest part of all the skill and strength that have been employed but fallen stones to encumber the fields and the streams.

'Must it be always thus?' asks Mr. Ruskin; 'is our life for ever to be with-

out profit, without possession?' The only answer to be given is a repetition of the old advice, to do what good work we can, and waste as little as possible. By all means let us preach or practice that doctrine, and take such comfort as we can in it; but the mystery remains and presses upon all sensitive minds. That Mr. Ruskin is inclined to deepen its shades, and indeed to take a rather bilious view of the universe, may be inferred from this brief account of his sentiments. Indeed, the common taunt against Calvinism often occurs in a rather different form. Why don't you go mad, it is said, if you really believe that nine-tenths of mankind are destined to unutterable and never-ending torments? But no creed known amongst men can quite remove the burden. The futility of human effort, the rarity of excellence, the utter helplessness of rea-

son to reduce to order the blindly struggling masses of mankind, the waste and decay and confusion which we see around us, are enough to make us hesitate before answering the question, What is the meaning of it all? A sensitive nature, tortured and thrust aside by pachydermatous and apathetic persons, may well be driven to rash revolt and hasty denunciations of society in general. At worst, and granting him to be entirely wrong, he has certainly more claims on our pity than on our contempt. And for a moral, if we must have a moral, we can only remark, that on the whole Mr. Ruskin supplies a fresh illustration of the truth, which has both a cynical and an elevating side to it, that it is amongst the greatest of all blessings to have a thick skin and a sound digestion.—*Fraser's Magazine*.

"LATENT THOUGHT."

BY R. H. HUTTON.

IT has struck me that a loose and somewhat obscure mode of speaking of "latent thought," and, indeed, of the intellect generally as an automatic machine independent of consciousness, has grown up of late,—a mode of speaking which is but an hypothesis, and, I believe, an unwarranted one, for accounting for a few mental phenomena, no doubt of the first importance, but quite inadequate for the purpose of establishing the very startling conclusion that you can reach some of the highest and best results of thought without thinking. My object, in the present paper, is briefly to classify the phenomena referred to, and maintain that they do not imply what they are supposed to imply, and what I do not think they could be supposed to imply if we realized fully the meaning of our words,—namely, that the brain, as distinct from the mind, is a sort of intellectual weaving-machine, from which, if you supply it with the raw materials of a mental problem, you may hope to take out the finished article without the exercise of any intellectual judgment or reflection. I don't think you can get the results of thinking without thought, of judging without judgment, of

creative effort without the conscious adaptation of means to ends. And I don't think that the phenomena—the real existence of which, of course, I fully accept—alleged as proving that this is possible, prove, or even legitimately suggest, so strange a conclusion.

(1.) One of the most remarkable evidences of what is called "latent thought" is furnished by the laws of perception. It is quite certain that there is for every person a *minimum visibile* or *audibile*, or generally a *minimum sensibile* (to use somewhat bad Latin), any thing less than which does not affect his perceptive faculties at all, but less than which yet is, of course, an essential part of that minimum itself. If the line I am writing on could be cut up into such a number of distinct spots that each of them was a trifle less than my *minimum visibile*, and if these spots were then removed to some distance from each other, I should not perceive their existence at all. But if any two of them were brought together I should then become aware of the existence of a spot. It is clear, therefore, that there are such things as physical constituents of an object of perception which, taken alone, are

not perceived, and yet which are essential elements of something that is perceived. If this is "latent perception," on the ground that one of these spots taken alone must affect me in some degree, though not in a degree sufficient to excite perception without combining with another of them,—then latent perception only means "a latent physical condition of perception;" and that there are innumerable such latent physical conditions,—conditions which only become patent in conjunction with other conditions,—I suppose every observant man would admit. The color of the spot, for instance, may be such a latent physical condition of perception, since a much smaller spot of bright color can be seen on a dark ground, or a much smaller spot of dark color on a bright ground, than could be perceived if the color of the spot were more similar to that of the background. Hence the redness of the two halves of the *minimum visibile* may be a latent physical condition of their being perceived when they coalesce into one, just as much as their size. The latent physical conditions not only of perception, but of feeling and thought,—the conditions of the nervous system essential to feeling and thought,—are probably innumerable. But no one will say that unobserved—*i.e.*, latent—physical conditions of feelings and thoughts, are feelings and thoughts, or we should be using language quite without that definiteness and appropriateness which are the main uses of language. The case I am now discussing is not one of latent perception, but of a latent physical condition of future perception. It constitutes no proof that you perceive without perception, though it may constitute a proof, to use Sir William Hamilton's language, that "what we are conscious of is constructed out of what we are not conscious of,"—a very different thing, though even that seems to me a little inaccurately stated, for it would be better to say, that what we conscious of is constructed out of what we *could not be conscious of without the occurrence of other conditions*. Surely we are conscious of the whole *minimum visibile*;—though not of each half, yet of both halves. In the doctrine, then, of latent physical conditions of perception, I see no justification for the phrase, latent perception. There is either perception or no perception. What is unperceived is not perceived, though it may be quite essential

to something that is to be perceived. That something may be happening in my brain, to my optic nerve, for example, even when only half the *minimum visibile* is opposite to my eye, and that this something is quite essential to what happens as soon as the whole is there, I am willing to admit. But the half does not cause a latent perception, though it is a latent physical condition of perception.

(2.) Dr. Carpenter, in his learned and instructive book on "Mental Physiology," speaks of the phenomena of recollection as proving a kind of activity of the brain or mind,—he guards himself against applying the term "thought" to anything of which we are not conscious, but I am not quite sure how far he thinks the distinction to be more than a question of words,—which is often even stimulated by our giving up the effort to recollect and passing to other subjects. And he gives us many striking instances of phenomena of which we have all, probably, seen less striking instances, in which the effort to recollect being futile, the missing memory flashes back upon us soon after we have relinquished the search. Farther, he expresses his belief that when phenomenon A is connected with C, but only, *as far as our consciousness is concerned*, through B, A frequently suggests C directly, without any even momentary flash of B upon the memory, the substitute for B being the cerebral or nervous state formerly connected with B, though not, in this instance, serving to bring B back into consciousness. I have no doubt at all that that is often a perfectly true account of the missing links in a chain of memory. There can be no doubt that the restoration of a former state of consciousness may be accomplished by any avenue whatever which leads back to it? and that if phenomenon A be a flash of light causing a particular nerve to vibrate, which nerve, again, is in the same sheath with two others, one closely connected with phenomenon B, and the other with phenomenon C, it might well happen that the second nerve might set the third in motion without itself suggesting phenomenon B, before the attention had been riveted by phenomenon C? The sight of a certain species of chocolate always suggests to me the jaundice, but I have no doubt that originally the missing link between these two conceptions was a particular sensation in the mouth or stom-

ach, which, as far as I know, I have never consciously recalled, but which the chocolate caused at a time when an attack of jaundice was coming on. It is quite possible that some very faint recurrence of that sensation—so faint as never to challenge conscious attention—was the missing link between the two impressions in my mind. But here, again, I see nothing like latent or unthought thought, but only unthought physical conditions of thought. Clearly Dr. Carpenter is right in saying that to leave off attempting to recollect and to rely on the trains of suggestions set going in the first effort, after the (probably misleading) control of the will has been withdrawn, is frequently the best chance we have for recovering a missing impression. But Miss Cobbe's and Mr. Wendell Holmes's suggestion, to which Dr. Carpenter will be, I believe, *misunderstood* by many, as lending in his book a certain amount of countenance, that this recovery is due to some mysterious so-to-say subterranean intelligence working beneath our consciousness, as a Secretary hunts up a quotation for his superior, seems to me baseless. Any man who observes his own mind, will notice that if he stirs up thoroughly any subject whatever, by ransacking its intellectual neighborhood, so to speak, he will for days afterwards have all sorts of cross associations with it flashing up at times in his mind,—and this whether he is in search of a missing impression or not. When you take down an old shelf of College books, you have, for days after, waifs and strays of College memories haunting your mind, some of them coming by direct, some by quite inscrutably indirect and subtle paths of association. Of course it is not remarkable that when one of these impressions happens to be missing it will come back to you on some such line of association. But all that this seems to me to signify is that memory depends on a number of latent and involuntary physical conditions, as well as a number of conscious and equally involuntary mental conditions, and that when you have exhausted the latter unsuccessfully, you had better fall back on the chance of help from the former. Man being made up of body and mind, there is nothing astonishing in the fact that there are bodily links, of which he may often be unconscious, between states of mind not otherwise associated. But this is not latent or un-

thought *thought*, it is a latent or unthought physical condition of suggestion. And that such conditions exist, I think every psychologist will admit. It does not the least follow from thus admitting that the conditions of memory are rooted in involuntary physical as well as mental laws, that the process of inference or judgment, of analysis or synthesis, or even of recollection itself, could be unconsciously performed. Yet, as I shall show, the theory appears to be held, even by a very distinguished man, that you may recollect without recollecting—*i.e.*, recollect elaborately with your muscles what has not yet emerged into recognition by your mind.

Again, (3) there are such things as automatic habits, which, once formed, require exceedingly little thought or attention, so that you may read aloud, or play on the piano, or walk through a crowded street, absorbed all the time in a train of intense thought or feeling, as widely removed as the Poles asunder from your immediate action. Such habits seem to be in some sense mental analogies of the first law of motion,—seem to show, that is, that even a law of change, once established in our minds, tends to persevere, in the absence of any resisting force. But are these cases of unconscious thought, of latent intellectual effort? I think not. They show with how little conscious effort you can do that which it took you a great conscious effort to begin to do, but* *not that an under-mind* is working without your knowing it, while the upper-mind works at something else. If an under-mind were working at reading aloud, for instance, while the upper-mind were dwelling on a totally different train of ideas, then it would follow that the drift of what you had been reading might be recovered by you in some future mental state. Now it is true, I think, that this sort of unconscious reading does sometimes impress the *sound* on your memory; the ear will retain what the ear hears, and sometimes a sentence comes afterwards back on you *verbally*, and then for the first time, if you take in the words, you apprehend what it means, and just as freshly as if you were then hearing it for the first time; but what one has read thus automatically is never apprehended by the mind, and consequently never recollected, unless it be

* "Not an *under-mind*, but an *under-party*," says Dr. Carpenter.—EDITOR C. R.

indirectly by the lingering of the sounds in the memory, which sounds are not translated into their import till some future time. It seems to me that these automatic habits imply no more than this,—that what takes but little effort and attention may be done simultaneously with what takes much. But this is no case of 'latent thought.' It is a case of giving exceedingly little thought to a thing which now requires little, and a great deal to another thing which requires much; the power of recalling afterwards, being generally proportional to the amount of attention given. That you cannot do even these semi-automatic acts without some attention is shown by the fact that if in such automatic reading you get to a new and difficult word, you have to break your chain of thought to read it, or else you break down,—and that if in your walk in a crowded street you get to a barricade, you must recall your mind to circumvent it. These seem to me phenomena not of latent thought, but of a minimum of thought. Dr. Carpenter holds that the power some remarkable calculators have of adding up a long column of figures almost at a glance, shows that the brain operates without the consciousness, inasmuch as there is not time to receive a distinct conscious impression of every figure. But that view surely explains a great deal too much. If any one figure were changed, unquestionably the result would be differently given, if it were rightly given. Either, then, the mind takes account of every figure, though so rapidly as not to be able to recall it afterwards, or it does not take account of any, and the whole operation is unconscious,—which seems to me a much wilder supposition than the former. To say that a man *cerebrates* a sum more quickly than he could calculate it, seems like saying that an intellectual habit which, by practice and faculty, has become astonishingly easy and sure, has ceased to be intellectual by reason of its economy of effort. But surely to require less effort and attention to a given achievement is not less, but more of a triumph of intellect, than to require more. What is called 'cerebration' is, I think, only a mental operation marked by great economy of intellect and effort. But why is such an operation more a case of 'cerebration' than the same operation slowly carried through all its stages? Where is the evidence that the less the

amount of intellectual effort, the greater is the amount of brain activity? As far as I can see, the 'cerebrational' assumption assumes that there can be no real economy of brain-effort at all, that as soon as we have less mental trouble over an operation there must be some compensation for the saving, in the shape of a great relegation of activity to brain-processes of which we are not conscious. I should have expected just the reverse,—that the greatest amount of 'cerebration' goes with the greatest amount of conscious attention and effort, and the least 'cerebration' with the least. Dr. Carpenter teaches us (see p. 475 of the work referred to) that semi-automatic habits are due to the mechanism of a different set of nerves from those which are called into play when we first painfully learn our lesson:—

"Now, since," he says, "in those cases in which man *acquires* powers that are *original* or *intuitive* in the lower animals, there is the strongest reason for believing that a mechanism forms itself in *him* which is equivalent to that congenitally possessed by *them*, we seem fully justified in the belief that in those more special forms of activity which are the result of prolonged 'training,' the Sensorimotor apparatus *grows-to* the mode in which it is habitually exercised, so as to become fit for the immediate execution of the mandate it receives (§ 194): it being often found to act not only without intelligent direction, but without any consciousness of exertion, in immediate response to some particular kind of stimulus,—just as an Automaton that executes one motion when a certain spring is touched, will execute a very different one when set going in some other way."

But admit that animal movements follow each other without any consciousness when a certain spring in the nervous system has been once touched, and that those animal movements are as well adapted as a locomotive with steam on to move a train, for the purpose which you had in view in starting them,—still this does not prove in the least that the results of thought can be obtained without thought, except in the sense in which it is always true of a mechanism properly prepared,—the said locomotive, for instance,—that after you have ceased to think, it will, when properly set in motion by human purpose, do what it had been adapted to do. But *have* we a logical or calculating machine, like Professor Jevons's and the late Mr. Babbage's, in our brains, which will, when properly manipulated, draw inferences, and calcu-

late arithmetical problems, without intelligence? I see no signs of it at all. I have no means of drawing an inference without understanding the premisses; I have no means of telling what the sin. 30° , is without knowing what a sine means, and what 30° mean. That machines may be devised to *imitate* to some extent the methods of human thought, does not in the least prove that we possess such machines in our own brains, in addition to the original intelligence which suggested them. And I don't think we do. My only quarrel is with the notion that you can get all the results of calculation out of your brain without discriminating 2 from 5; that you can have all the fruits of recollection while your memory is a blank; that you can infer without a conscious act of attention; that you can judge without a trace of any weighing of the pros and cons. And this is the view which a small part of Dr. Carpenter's doctrine seems to me at least to countenance.

For instance, (4) Dr. Carpenter gives as a tenable explanation of certain supposed facts adduced by spiritualists, that a person present at a séance, having some time ago known certain facts reported by the movements of the table, but having quite forgotten them, had yet involuntarily and unconsciously caused the table to move so as to assert them, they being at the moment, in this person's own belief, not only false, but completely imaginary:—

"Another instance, supplied by Mr. Dibdin (*op. cit.*), affords yet more remarkable evidence to the same effect; especially as being related by a firm believer in the 'diabolical' origin of Table-talking:—A gentleman, who was at the time a believer in the 'spiritual' agency of his table, assured Mr. Dibdin that he had raised a *good* spirit instead of *evil* ones—that, namely, of Edward Young, the poet. The 'spirit' having been desired to prove his identity by citing a line of his poetry, the table spelled out, 'Man was not made to question, but adore.' 'Is that in your 'Night Thoughts?'" was then asked. 'No.' 'Where is it, then?' The reply was 'J O B.' Not being familiar with Young's poems, the questioner did not know what this meant; but the next day he bought a copy of them; and at the end of the 'Night Thoughts' he found a paraphrase of the Book of Job, the last line of which is, 'Man was not made to question, but adore.' Of course he was very much astonished; but not long afterwards he came to Mr. Dibdin, and assured him that he had satisfied himself that the whole thing was a delusion—numerous answers he had obtained being obviously the results of an

influence unconsciously exerted on the table by those who had their hands upon it; and when asked by Mr. Dibdin how he accounted for the dictation of the line by the spirit of Young, he very honestly confessed, 'Well, the fact is, I must tell you, that I had the book in my house all the time, although I bought another copy; and I found that I had read it before. My opinion is that it was a *latent idea*, and that the table brought it out.'"

Now, Dr. Carpenter does not vouch for this fact, and of course it is not the fact itself which I am either accepting or questioning, but only the validity of the explanation suggested, if the fact itself be assumed. That explanation seems to me even less credible than the so-called spiritualist explanation. It is, at least, *possible* that invisible intelligences may correct our blunders of memory. But to ask us to believe that one and the same person can have, at one and the same moment, nervous arrangements for recalling accurately by the mediation of his muscles, *yet without any act of memory*, how a thing really happened, while he is making, by an act of recollection, an erroneous statement on the same subject through his consciousness and his voice, is, I think, to ask us to believe a much more improbable explanation in order to avoid a less improbable one. And this is why I think the former improbability the less. If the fact were as related, we should clearly have evidence that the table's movements were due to some agency which understood the structure of language and its meaning. Now, if that agency were that of the person who, after having once read Young's 'Job,' had forgotten completely both the existence of the book and the line in question, it would follow that at the same moment of time, within the limits of the same organization, there existed two distinct agencies, both able to use language as a means of conveying rational meaning, one of them, however,—the one apparently in command of the speech and the brain,—without any memory of Dr. Young's 'Job,' and of the particular line quoted from it, and the other of them,—which must have had a certain control over the spinal cord and the system of reflex action,—retaining that memory perfectly. Now, while we have ample experience of *successive* phenomena of this kind within the limits of the same individual's experience, surely not only have we no experience whatever of simultaneous phenomena of the kind, but if we

had, our ideas of moral responsibility would be extraordinarily confused. Which of these two intellectual agencies is to be identified with the person of the individual who was the source of both? The one which remembered correctly and telegraphed the accurate memory through the table, or the one with a defective memory which asserted its inaccurate memory by the voice? If my spinal cord holds one view, and my cerebrum another, as to the events of my past life, the one might turn Queen's evidence against the other but how one of them could be hanged, while the other received a free pardon, would be an embarrassing problem. Speaking seriously, it seems to me that this doctrine of a 'latent' memory capable of articulate telegraphy, in direct contradiction to the conscious memory,—which denies simultaneously all knowledge of the matter so telegraphed,—passes infinitely beyond any hypothesis warranted by the class of facts I have hitherto dealt with, and could hardly be true without our constantly coming across ample evidence of its truth. That men forget a thing one moment and remember it the next, is certain; but while they forget, they forget, and have, as far as we know, no oracle to consult in that part of their system to which the reflex actions are due, by the help of which the forgotten facts can be recalled. If some part of my body can not only recover its hold of a story I have forgotten, but *put it into human speech*, while I continue quite sincerely to disown it, it seems to me perfectly clear that there are two intellectual agents under cover of my organization, and not one. But that is far more surprising than the spiritualist hypothesis itself. It is conceivable at least, that an invisible intelligence might use my hands to transmit ideas of which I am not the originator, just as any one strong enough to do so may guide my hand when I am blindfolded, so as to write a letter, of the contents of which I am ignorant. But it is hardly conceivable that I myself can do so, without sharing the knowledge communicated by the means in question. If that could be, then "latent thought" must mean thought which can be communicated and made intelligible to others without anyone to think it; for I don't think it, I deny thinking it; and the automatic apparatus which communicates it does not *think* it, for, by the hypothesis, it is not attended by consciousness at all, and on appeal being made to

consciousness, it is promptly disowned. Now, what is there in the facts which are universally admitted as to the latent physical conditions of perception and memory, and as to the half-automatic character of habitual actions, to justify so astounding a challenge to all experience as this? Observe that what seems so incredible in this theory is the use of language implying *conscious* thought without any consciousness behind it. I should not deny of course that a *physical* habit, say a nervous twitch in the fingers, might testify, even *against* a man's own conscious memory, to the truth of a story in which was to be found the explanation of the origin of that twitch, a story, that is, which the man himself had quite forgotten. Just so a scar is often a physical record of a blow of which the conscious memory holds no trace. But if letters were selected, one by one, to spell out the word "Job," and the line quoted from it, "Man was not made to question, but adore," there would be far *more* evidence of consciousness somewhere than there would be even, if the line had been merely spoken. It is possible enough that in the case, for instance, of anyone who repeats a given cry thousands of times in the same day, like a newspaper boy or an old clothesman in the London streets, the muscles of speech may take so fixed a habit as to pronounce significant words without any corresponding thought to put them in motion. But suppose the mode of communication suddenly changed to a *new* one, like the individual selection of the letters, one by one, which go to make up the words—and surely the hypothesis which denies consciousness to the agency selecting these letters, becomes utterly untenable. It is quite conceivable, of course, that in some abnormal sleep, under the influence of a different set of physical or mental suggestions, I might recall and correctly repeat a line I had completely forgotten, and refer it to its right author, while in my waking state I fail to recall it. But if I am at the very same moment to be *both* in an abnormal trance *and* awake, with a distinct mechanism for communicating my dreams and my recollections, with an inconsistent set of statements to communicate, and with only one consciousness—which lends its imprimatur to the wrong set of the two, even while I am carefully comparing them—then I conceive that no beam of light doubly refracted by Iceland spar could be

in a worse condition for tracing its historical identity than I.

(5.) I do not even attempt in this paper to explain the curious facts on which the doctrine of 'unconscious cerebration' is chiefly rested,—for a very good reason, because I can't. But a good many of them surely indicate a very different explanation—namely, discontinuous states of active thought, in which both brain and consciousness must have in every sense fully co-operated, but the link between which has for some reason, connected more with physical than mental causes, been temporarily lost. Dr. Carpenter has collected in his very valuable book many most curious illustrations of the way in which a great shock to the nervous system will utterly annihilate memory for a time, so that the sufferer has to begin to learn even the rudiments of knowledge anew, and often makes great progress, when another physical change in his or her brain suddenly restores all the former knowledge, but obliterates completely the memory of the painfully reacquired knowledge of the intermediate period. No one even suggests that the intellectual processes of the intermediate period were not consciously performed, though they are separated by a film of complete oblivion from the normal consciousness. Again, Dr. Carpenter gives us some very curious illustrations of the successful solution during sleep of problems unsuccessfully attempted during waking. Take this, for example, among many of the same kind :—

"The first case is given by Dr. Abercrombie, on the authority of the family of a distinguished Scottish lawyer of the last age :—'This eminent person had been consulted respecting a case of great importance and much difficulty ; and he had been studying it with intense anxiety and attention. After several days had been occupied in this manner, he was observed by his wife to rise from his bed in the night, and go to a writing-desk which stood in the bed-room. He then sat down, and wrote a long paper which he carefully put by in his desk, and returned to bed. The following morning he told his wife that he had had a most interesting dream ; that he had dreamt of delivering a clear and luminous opinion respecting a case which had exceedingly perplexed him ; and that he would give anything to recover the train of thought which had passed before him in his dream. She then directed him to the writing-desk, where he found the opinion clearly and fully written out ; and this was afterwards found to be perfectly correct.' (*Intellectual Powers*, 5th Edit., p. 306.)"

It cannot reasonably be asserted that thoughts which were so completely in possession of this person's mind as to have partially survived sleep, were not real and vivid exercises of the thinking power. Clearly here is a case of genuine and concentrated thought almost completely forgotten, in consequence of the cessation of the physical state in which the train of ideas was elaborated. In various other instances given by Dr. Carpenter the oblivion is more complete, but there is not less evidence of real *thought* (as distinguished from the mere train of suggestions which can alone be plausibly referred to 'cerebration'). If now in these cases it is quite certain that, be the cerebral process what you please, there was as real and as conscious thought, as any thinking man can ever boast of, and yet that very often the forgetfulness was nearly or quite complete, is it not fair to conclude that in a great many of the cases on which Dr. Carpenter appears to insist so much—those in which, after a long apparent mental rest, we return to a subject to find it taking quite new and very much clearer shape in our minds—the progress is probably due not to 'unconscious cerebration,' but to forgotten intervals of conscious intellectual work ? For my own part, I am persuaded that this very often *is* the case. The side-glances one gives to a subject which is not exactly *before* the mind, but which is resting in it in comparative abeyance, are, I am sure, though seldom remembered, extremely fruitful. It is these which tell you where you have been pressing a favorite crotchet too hard, which set the balance of the judgment right, and which open up new and important tracks of consideration that had been well-nigh neglected under the pressure of too much eagerness. When one remembers that such side-glances may, for many men, take place in sleep no less than in waking hours, and would, without being individually recalled, alter completely the aspect in which a subject presents itself, I confess I see in facts of this kind no excuse for the startling hypothesis that you ever attain to a distinct conclusion without any conscious consideration of the conditions, that you ever 'cerebrate' a sum without mathematical process, or that you ever attest articulately a fact which at that very moment you have quite forgotten.—*Contemporary Review*.

SLAVERY AND THE SLAVE TRADE.*

BY SIR SAMUEL WHITE BAKER, PASHA.

I PROPOSE to trace the origin of slavery, and to show that the existence of this great evil depends upon the low scale of civilization of the dominant power. I assume that a high scale of civilization renders a state of slavery impossible, as a highly educated and exalted society must necessarily uphold the liberty of every subject. If this view is accepted, we can only arrive at the conclusion that the emancipation of slaves and the general suppression of the slave trade throughout the world will be a slow and gradual process, as the freedom of the weak will depend upon the advancement and general mental development of those countries which are now semi-civilized, and are accordingly slave-holding powers.

The earliest history of the world commences with a rude want of sympathy. The word "mercy" was not understood until taught by our divine teacher, Jesus Christ. The wars of the Jews as described in the books of Moses are terrible pictures of the hard and bloody instincts of the times. No mercy!—but a ruthless slaughter of the helpless.

"And we utterly destroyed them, as we did unto Sihon king of Heshbon, utterly destroying the men, women, and children, of every city."†

The prophet Samuel hews to pieces with his own hands his kingly prisoner Agag. The Old Testament is full of the most revolting accounts of wholesale massacres without respect for age or sex. Many of the Jewish wars were those of extermination, in which by a bloody command even the "infant and suckling" perished.

Turning from such disgusting scenes of bloodshed, it is almost a relief to regard the institution of slavery, and to study the laws by which the position of slaves was regulated. We see that among the Israelites there were distinctions between classes of slaves. Their own people, *i.e.* Hebrews, might be slaves; but these appeared to enjoy a superior protection to those who were of foreign origin.

"Both thy bondmen, and thy bond-

maids, which thou shalt have, *shall be of the heathen that are round about you; of them shall ye buy bondmen and bondmaids. Moreover of the children of the strangers that do sojourn among you, of them shall ye buy, and of their families that are with you, which they begat in your land: and they shall be your possession. And ye shall take them as an inheritance for your children after you, to inherit them for a possession; they shall be your bondmen for ever; but over your brethren the children of Israel ye shall not rule one over another with rigor.*"*

This is incontestable evidence that slavery was not only permitted, but regulated by laws, which enjoined the purchase of slaves both from the nations without, and from those of foreign extraction, who had been born among the Israelites. These slaves, or, as the translation renders them, "bondmen," were real property, which descended together with the flocks and herds from father to son.

The privileged class of slaves were the Israelites, who were to receive their freedom on the seventh year. "And if thy brother, an Hebrew man, or an Hebrew woman, be sold unto thee, and serve thee six years, then in the seventh year thou shalt let him go free from thee."†

The permission thus given to the custom of buying and selling individuals of their own nation, had evidently led to abuse in the kidnapping of slaves. This is proved by the severity of the law, as expressed in Deuteronomy xxiv. 7: "If a man be found stealing any of his brethren of the children of Israel, and maketh merchandise of him, or selleth him; then that thief shall die; and thou shalt put evil away from among you." Thus the children of Israel were watched over by the law, while the foreigners were condemned to hopeless slavery. Although the children of Israel could be sold, they were only leasehold property for a term of seven years, while the foreigner was freehold property—a slave for ever.

Where the lives of prisoners of war

* The Rede Lecture for 1874.

† Deut. iii. 6.

* Leviticus xxv. 44-46.

† Deut. xv. 12.

were spared, they became slaves to their conquerors. In the song to magnify the glory of that frightful treachery committed by Jael, in the murder of her sleeping guest, Sisera, we find the words: "Have they not divided the prey; to every man a damsel or two?" Thus from remote ages a great portion of the spoil of victory consisted in slaves. In the wars with the Midianites, the female prisoners of maturity were massacred, while the young virgins were apportioned to the soldiers. Slavery naturally increased the horrors of warfare. The males were ruthlessly slain, that the young girls, being fatherless and friendless, might in despair resign themselves to their hopeless lot as captives, without attempts at escape. By the evidence of the Bible, we know that slavery was an institution recognized by the law of Moses. To those who cling to the laws of Moses as the foundation of their religious creed, it will be hard to argue against slavery. The great slave-trading nations are Mohammedans, who believe that by Holy Writ they are not only justified, but encouraged to capture or purchase slaves, who, from the position of heathens, may become converts to the true faith, and thus serve God, at the same time that they minister to the comfort of their proprietors. So long as the Mohammedan religion shall endure, this principle of slavery will be admitted. The attempts of Christian powers to suppress that trade will simply be regarded as attacks by Christianity directed against the Moslem creed. The grand law of force will to a certain extent always rule the physical world.

Optimists cling to the hope that national disputes will be eventually settled by arbitration, and that the affairs of nations will be legally settled by an international European court, which will supersede gunpowder and the bayonet. Unfortunately for moralists and philanthropists, the law of force is one that cannot be denied; and the nation that is physically the most powerful will carry the greatest weight in the counsels of the world. Thus the civilization of the present age has not lessened the occurrence of wars, which are still the ultimate courts of trial in national disputes; but the horrors of warfare are mitigated by the sympathetic charity of Christian countries. The wounded of the enemy are tended by the surgeons of the

victor, instead of being bayoneted on the field. Prisoners are carefully housed and fed, instead of being carried into slavery. This is the effect of Christianity, which, although it cannot repress warfare, has so far softened the savage instincts of mankind that wars are conducted according to international rules founded upon humanity. On the other hand, when we regard semi-barbarous countries, we see the same savagery in warfare as committed by the ancients. Witness the war between the Turks and Greeks which happened in our own time. The ruthless massacre of the Greeks was followed by a wholesale system of slavery. Young boys and lovely girls were torn from their blood-stained homes to become the slaves and to gratify the lust of their brutal conquerors. That dreadful example of our friends the Turks represented the barbarity of remote ages. How many of our ancestors among the noble Britons perished as gladiators in the Roman arena? The Roman conquest of Britain furnished slaves celebrated above all others for their stature, personal beauty, and courage. From time immemorial the adverse fortune of war resulted in the slavery of the captives. This was a universal rule. It appeared that to enslave a fellow-man, was a natural human instinct.

At the present day we regard the distant past with horror, and we are inclined to be almost incredulous to the historical accounts of wholesale slavery and massacre. We must at the same time remember that so recently as the reign of James II. political prisoners of our own kith and kin were sold as slaves to toil and die in the tropics of the West Indies. The maids of honor of the Court of James II. (not 200 years ago) received presents of Englishmen condemned for treasonable offences. These victims of the law were sold by the Queen's honorable maids to work upon the sugar plantations of Jamaica; and the proceeds of the flesh and blood of their own countrymen assisted to deck the fair persons of these courtly angels. When we regard such deplorable facts face to face, we must perceive the immense improvement of society, which in 150 years from that date resulted in the emancipation of all slaves in British possessions. This magnificent example of humanity, at a cost of 20,000,000*l.* to this country, was the most noble act in the history of Eng-

land. Less than a century and a half before that time *Englishmen* had been sold as slaves. Englishmen now determined that freedom was the natural inheritance of every human being; that the dark-colored skin, in the eye of Him who had created it, was entitled to the same justice as the white.

From that hour England proved her right to represent true Christianity. Steadily has our country worked in the cause of liberty, not only for the black savage, but for our own people. This great example, heroically made at an immense sacrifice, stirred up the hearts of other nations, which joined in the good cause; until at length the question of slavery was raised in the New World. The interests of the South were supported by slave labor. Civil war commenced on a gigantic scale. The great political convulsion in America terminated in the emancipation of the slaves.

By this grand act, the result of England's first example, the whole civilized world had declared against slavery. The only slave-holding powers with whom we are in communication are Turkey and Egypt, combined as the Ottoman empire. All Christian countries had agreed upon the freedom of the blacks. The Moslem alone represented oppression, and resisted the great movement of liberty. We have already seen that the actual question of slavery rests upon religious creeds. The Mohammedan believes in the laws of Moses and in those of the Koran, which encourage, or at the least sanction, the slave trade. It is therefore impossible to convince so fanatical a people of the crime of slave-trading. They have the answer ready—"You are Christians, and your laws prohibit slavery. We are Mohammedans, and our laws permit it. We believe that *we are right*, and you, being infidels, *must be wrong*." If the Mohammedans were more powerful than Christian countries, they would scorn and defy our interference. Slavery is, in fact, a necessary institution to Mohammedanism. According to the laws of the Koran, a believer may have four wives at the same time. Thus, should each male take advantage of the law, a female population would be required four times as numerous as the male. Polygamy is the root of domestic evil, and must ruin the morality of any country. The destruction of domestic morality will entail

a species of barbarism throughout the country where polygamy is permitted. The women remain ignorant. If educated, they would never permit so great an insult to their sex. It is therefore in the interest of the men that the females should remain without education. Nothing can be so detrimental to the prosperity of a country as the ignorance of women. The Mohammedan girls are married to men whom they have never seen until the bridal day. Very few can either read or write. They are kept prisoners in the harems, jealously guarded by black eunuchs; and they know absolutely nothing of the outer world, few having an idea of any country beyond their own, of which they know but little. Whether the world is round or square they could not tell. Ignorance begets idleness. The life of the harem is passed in frivolous, and not always modest, conversation. The time is killed with difficulty by such amusements as the dancing girls, the *almah*, and the tittle-tattle of female friends, assisted by as much sleep as can be coaxed from the day by languidly lounging upon the divans in a state of dishabille.

It is not to be supposed that harem life is a terrestrial paradise, where love revels in undisturbed harmony. Every house is full of discord in proportion to the number of wives and concubines. Jealousies innumerable, together with "envy, hatred, malice, and all uncharitableness," form the domestic bill of fare for the polygamist. It follows as a matter of course that uneducated mothers are incapable of instructing their children. The little ones born in the harem are witnesses of the jealousies and bickerings of the various mothers from earliest infancy. They grow up with the feelings of hatred for their half-brothers that such an example would insure. The boys are launched into school-life without those sterling rudiments of education and that mother's fond advice that is with us the sheet-anchor throughout our lives. They leave the harem not only ignorant, but wicked; full of low cunning, and without the slightest regard for truth. As the boy's early life has been passed in jealousies and hatreds among the women and their offspring in the harems, so he carries these feelings into life. He grows up without affection—cold, selfish, hypocritical, cunning, and fanatical. He possesses no love of home, for his home was one of

divided affections combined with hatreds. Without a love of home there can be no love of country; thus in Mohammedan countries there is no patriotism, but only fanaticism. This miserable position is mainly due to polygamy; thus the result of the system is the moral ruin of a country.

It is natural that a great demand for women should, to a certain extent, render them indolent. The young girl grows up with the certainty that, without any exertion on her part, she will eventually be provided for by marriage. She has therefore no inducement either to cultivate accomplishments or in any way to improve her present condition. She thus passes her early years in the idleness and ignorance of the harem until her turn shall arrive for marriage; after which, she will expect a staff of slaves to be in constant attendance. Female slaves, according to the present domestic arrangements of Turkey and Egypt, are absolutely necessary in the harems. It is impossible to hire Arab women as domestic servants. Women are too scarce, owing to polygamy; therefore, being made independent by marriage, they will not engage as servants. Slaves are the only resource; but even these are frequent additions to domestic difficulties.

The female slaves of Turkey and Egypt may be divided into three classes—Circassian, Abyssinian, and negresses. The Circassians rank the highest; and although they commence their harem life in the position of slaves, they are usually advanced to the dignity of wives. Thus a married lady has frequent cause to be jealous of her own slaves, who, having gained the affections or won the admiration of her husband (their master), may become his wives, and, if young, may enjoy greater favor than herself, the mistress.

The Abyssinian girls are remarkably pretty, with large eyes and delicately shaped features. These girls are brought down from the Galla country by the slave-dealers from Abyssinia. That beautiful country, which, had we not wantonly deserted it, might have become of great importance, is now a prey to anarchy. The opposing tribes are only too happy to sell their female prisoners to the Arab slave-traders. These people bring down the young girls in gangs by various routes, but the principal outlet is the Red Sea, about

Massowa. A great market is at Gallabat, the frontier town of Abyssinia. There I have seen them crowded together in mat tents, waiting for purchasers from those commissioned to procure slaves by the wealthy Arabs and Turkish officials. At Gallabat a handsome young girl of sixteen is worth about 15*l.*, but the same girl at Cairo would fetch 40*l.* or 50*l.* The Abyssinians are a much advanced race compared with the negroes of Central Africa. The women are very affectionate and devoted to those who show them kindness. Thus, as they combine beauty with devotion, they are much sought for, and command a high price in the market. They are seldom purchased by common people, as their price is too high, and they cannot earn money by bodily labor like negresses, being too delicate and unable to sustain fatigue. Although they are generally termed Abyssinians (*Habbeshees*), I have never met with a true high-caste Abyssinian girl—these would be Christians; whereas all I have seen have been Gallas—a Mohammedan race. Many of these poor girls die from fatigue on the desert journey from Gallabat to the sea-coast. Those who reach Khartoum, or the towns of Lower Egypt, are sold to the wealthy, and generally take a high position in the harems, often becoming the wives of their purchasers. In the Soudan I have met several charming Abyssinian ladies, who, having married European residents, have become perfectly civilized: proving that the race is capable of great advancement.

We now arrive at the lowest class—the negress—the *slave* “par excellence,” as accepted in England. The negro slaves are captured from every tribe between Khartoum and the equator. There is no slave trade, but every slave has been *kidnapped* by the slave-hunters of Khartoum. Before I suppressed the slave trade of the White Nile, about 50,000 slaves were brought down from the countries bordering that river every year. The young girls are preferred when about seven or eight years old, as they are more readily taught the work required. The best looking girls are taken north, and are distributed to the various markets by diverse routes; some to the Mediterranean, *via* the desert from Kordofan to Tripoli; others to the Red Sea, and many to Egypt. The negresses purchased for the harems occupy the position of either simple slaves or concu-

bines, according to the desire of their proprietor, but they very rarely, if ever, attain to the dignity of wives, as they are properly regarded as the most inferior race. They are accordingly in the common position of servants.

This short description of the domestic position of female slaves will be sufficient to explain the want of cohesion throughout Mohammedan society. There are few fathers, but many mothers. There is so constant an admixture of foreign blood that it is difficult to decide a true ethnological position. In one family there may be by the various mothers a half Circassian, half negress—half Abyssinian, half Arab, half Turk; and this motley group of half-bred children will in their turn procreate a second generation of half-breeds, by intermarrying with women of strange races. Such a progeny must be incapable of the feeling of patriotism. They belong to no special race, and consequently they take but small interest in the prosperity of the country. Each prosecutes his selfish interests. There is no nationality; not even a patriotic ejaculation common to other countries. No shout, no heart-stirring cry when a regiment is pressing on to victory. "God and the Prophet!"—but no other exclamation is heard from the mouth of either Turk or Egyptian. The result of such a domestic system must ruin the most prosperous country; each house is "divided against itself." The enervating life of the harem destroys the energy of man, while it demoralizes woman; thus the men become lazy and effeminate, and the country, as a matter of course, languishes.

Although the main points of the Mohammedan religion are theologically not far distant from our own, there is a direct element of confusion in all their domestic laws, which, unless reformed, will continue to deteriorate their races. If we look back to the great fanatical movement which was the first impulse of the early Mohammedans, we behold the terrible effect of a mighty religious shock upon all the flourishing countries of Northern Africa. The flood of armies, led on by an irresistible enthusiasm, rushed like an earthquake wave from east to west, burying beneath it all civilization, extinguishing the light of science, crashing down monuments of antiquity, and threatening even Europe with the desolation that it had left from the Red Sea to the Atlantic. The path of the

Moslem was marked by destruction. Egypt, that had been the oldest seat of learning and of wisdom, sank under the Mohammedan assault. The grand library of Alexandria, with untold historical treasures, was wantonly committed to the flames. For weeks all the hot-baths of Alexandria were heated with manuscripts containing information that has now perished for ever. The miserable fanatics declared that "all that man required to know was contained in one book, *'the Koran,'* therefore all other books were hurtful, and should be destroyed." It would be impossible to speculate upon what the result of the Mohammedan movement might have been had Europe succumbed to the attack; but from the present position of Turkey since the conquest by the Turks, we may judge by analogy that other portions of Europe would have exhibited the same retrogression. The countries of Northern Africa have sunk into complete insignificance. The Delta of Egypt must always continue fruitful, owing to its extraordinary fertility caused by the annual inundation of the Nile; but beyond the Delta, within the range of Upper Egypt, we find nothing but the imperishable relics of former greatness. When we regard the present existing population, we look back with wonder and regret to that which has passed away.

If we accept the present miserable state of Northern Africa as the result of Mohammedan conquest and occupation, and believe, as I have suggested, that the domestic laws—and especially polygamy—are the curse of the country, the first step towards a wholesome reform must be the suppression of the slave trade, which will reduce the number and supply of women. If the sexes are nearly balanced, polygamy will by degrees cease to exist. When education shall have improved the intellectual condition of women, and the suppression of the slave trade shall have proscribed the imports of foreign women, the natural instincts of their sex will determine their domestic position. Women will refuse to remain like herds of females belonging to one male, and they will be enabled to assert the natural right of one woman to be the sole conjugal companion of one man. This will be one of the great moral results of the suppression of the slave trade: that women shall no longer be subjected to such competition, by reason of extra-

ordinary numbers, that they must submit to the degrading position in which they are now placed by polygamy. If women are in moderate numbers, they will be enhanced in value, and they will be able to assert "*women's rights*;" but they, like all other articles, will be reduced in value when the supply exceeds the demand. At present the free trade in foreign women in Egypt and Northern Africa reduces the value of the home production; thus they have no escape from the degradation of polygamy.

From whatever point of view we regard slavery, it is an unmitigated evil. In a short outline we have traced its origin to barbarous ages, and we have admitted that such an institution is incompatible with civilization. At the same time we must admit that the question is surrounded by many difficulties. In England we at once cut the Gordian knot, and by an Act of Parliament we suddenly emancipated our slaves and rewarded the proprietors with an indemnity of twenty millions. There can be no question that the act was chivalrous, but at the same time foolish. There was a lack, not only of statesmanship, but of common sense, in the sudden emancipation of a vast body of inferior human beings, who, thus released from a long bondage, were unfitted for a sudden liberty. The negroes thus freed by the British Government naturally regarded their former proprietors as their late oppressors, from whom they had been delivered by an Act of Parliament. This feeling was neither conducive to harmony nor industry. The man who is suddenly freed requires no logic to assure him that he has been wrongly held in slavery; his first impulse is therefore to hate his former master. A slave who has throughout his life been compelled to labor, will naturally avoid that labor when freedom shall afford him the opportunity. Therefore the sudden enfranchisement of a vast body of slaves created a ruinous famine of labor, and colonies that had been most prosperous fell into decay; the result of ill-advised although philanthropic legislation. If a value had been fixed upon every negro slave as the price of liberty, and he had been compelled to work with his original master at a certain rate per day until he had thus earned his freedom, the slave would have appreciated the benefit of his industry; he would have become industri-

ous by habit, as he would have gained his reward. At the same time he would have parted, or perhaps have remained with his master, without an imaginary wrong. The emancipation of slaves must be gradual, especially in such countries as Turkey and Egypt. England may play the philanthropic fool, and throw away twenty millions for an idea, but how can we expect a poor country to follow so wild an example?

This is one difficulty. We press Egypt to emancipate her slaves and to suppress the slave trade; but the emancipation would be most unjust and injudicious unless compensation were given to the proprietors who had purchased those slaves when slavery was an institution admitted by the Government. A Government has no more right to take away a man's slave than his horse or his cow, unless some wrong has been committed in the acquisition. Where a Government cannot afford to pay a general indemnity for a general enfranchisement, it is absurd for England to press for a general emancipation. We will even suppose that the slaves were suddenly emancipated throughout the Egyptian dominions, what would be the result? One half would quit the country and return to their old haunts of savagery. Others would become vagrants; the women would set up drinking and dancing houses, and a general demoralization would be the result.

The present physical condition of slaves throughout Egypt is good. They are well fed, and generally are well treated by their masters. In many cases a slave rises to a high rank. I know an instance where a slave rose to the high position of Pasha and Major-General. One of the lieutenant-colonels under my command had originally been a slave; and most of the officers in the Soudan regiments had risen through good conduct from the same low origin. Among the upper classes, the domestic slaves are frequently in a better position than other household servants. A servant may give notice to his master, and change his situation at will; thus he loses the confidence that would be reposed in the slave who actually belongs to his master. Slaves are generally proud of belonging to a master; and I have frequently heard them speak with contempt of those who have no proprietor, as though they were so inferior

that they were generally disowned. It is a mistake to suppose that the slaves throughout the East are anxious for delivery. Negroes do not care for change. If they are well fed and clothed, and not overworked, they are generally faithful and contented. Among the lower classes, the slave always eats from the same dish as his master; and there is a feeling of pride in his position, that he forms a portion of the family. The eunuchs are especial favorites, and are always accepted as members of the household entitled to peculiar consideration. They are accustomed to every luxury, and take the highest positions in the houses of the wealthy. It has been remarked that the Viceroy of Egypt, if in earnest, should set the example of liberty by emancipating all the slaves of his harems. Such remarks can only proceed from those who are utterly ignorant of the position of eunuchs in a royal household. These effeminate personages never work; they are perfectly incapable of earning a livelihood by any other occupation except that in which they are engaged. To set these people at what is called "liberty" would be to turn them on to the streets to starve.

This being the general position of slaves in Egypt, the question of enfranchisement is extremely difficult. Liberty would certainly not improve the temporal condition of the slaves. At the same time, slavery should be suppressed. We must remember that the population of Egypt is unequal to the amount of labor required for the cultivation of the land. The principal fellahs, or farmers, of Upper Egypt are large proprietors of slaves. These negroes work the water-lifts for irrigation, and perform the chief labor on the fields. They are contented and well-conducted people, who would certainly not be improved by a sudden emancipation, which would as certainly bring ruin upon the farmer whose land would be thrown out of cultivation. The more intimate we become with the subject, the greater is the difficulty in dealing with slavery so as to be just to all parties. We have no right suddenly to snatch up the cause of the negro, and bring a verdict of guilty against his master. If we determine to offer justice to the black man, we must also preserve some show of equity towards the white. No one has a greater horror of the slave trade than myself, and perhaps no one

has made greater personal efforts to suppress it; but I must acknowledge that custom and ancient laws have granted a right to certain races, according to their religious belief, not only to hold, but actually to trade in human beings. To carry out our views of philanthropy we exert moral force on land, and physical force at sea; but we must admit that the physical force has achieved more than the moral in the suppression of the African slave trade. Notwithstanding our efforts during many years, it is notorious that the slave trade still flourishes to a large extent, which proves that this old institution is so deeply engraved upon the hearts of certain nations that they will run the most dangerous risks in such an enterprise. If we are determined to suppress this abomination, we must sternly *insist* upon its suppression, but this must not be in vague terms. The nuisance is admitted, and the evil must be vigorously attacked. At the same time, a certain respect is due to Turkey and Egypt.

The Viceroy of Egypt, Ismail Pasha, has taken the initiative at the request of European powers, especially England. The great difficulty is a decided plan of action. The assumed case is as follows:—

The negro is sure to retrograde if left to his own unassisted endeavors.

Under certain conditions he is a valuable member of society.

These conditions necessitate a certain amount of coercion.

Without coercion he is useless: with coercion he is valuable.

The negro has therefore been made a slave from time immemorial.

We are now determined to enfranchise him, therefore we must decide upon his future position. In my opinion, we must make a distinction between those negroes who have been slaves, and those who are the free inhabitants of their own country, when we consider this important question.

I have endeavored to exhibit the evil of slavery, while describing the difficulties attending a too sudden emancipation. The wisest course would be a gradual enfranchisement, commencing from a certain date; and I would suggest that in this instance we should pay some respect to Mohammedan powers by so far adhering to the Mosaic law as to adopt the principle of the Hebrew term of bondage—"then in the seventh year thou shalt

let him go free from thee." By adopting this course the slaves would be gradually educated for liberty, while the interval of seven years would enable their proprietors to make certain domestic arrangements that would prevent confusion on the day of jubilee. I believe that a reform thus quietly carried out would simply change the slave into a free servant, and that few would leave their old masters. At the same time that the blessing of freedom would be conferred upon the slave, no actual wrong would have been inflicted on his master. The seven years' gratuitous service would be the price of liberty, and would cancel the first cost of purchase.

I will now turn to the more interesting condition of the negro savage in his native land. It has been the custom to argue upon the *negro* as though only one species could be represented by this designation: the negro has been brought forward as a special type. Our researches in Africa during the last half century have shown us a great variety of negroes differing in appearance and in intelligence according to the conditions of the countries they inhabit. We find only one pervading peculiarity among all African negro tribes—the woolly hair growing in separate tufts. There is no exception to this rule; but beyond this the negroes of various portions of Africa differ as much or more than Europeans. The negroes of the West Coast have broad flat noses, prognathous jaws, large mouths, with excessively thick lips. As we alter the meridian, and proceed from west to east, we find that this peculiarity is gradually reduced, until we arrive in countries where the facial angle is in good proportion. The thick lips and deformed mouths disappear, the hideous nose is replaced by an excellent feature, and nothing remains of the negro *par excellence* but the peculiarity of the hair. The character of tribes differs as much as their personal appearance. Those pastoral people who possess large flocks and herds are the most warlike. This is the result of a life of vigilance as shepherds, who are constantly exposed to the attacks of their neighbors. In all pastoral countries the natives are constantly at war, as cattle-lifting is a sport generally indulged in. The agricultural tribes are more amenable to law than the pastoral. The shepherd, in the event of war, can drive off his

flocks to a secure retreat; therefore he has less fear of disturbance; but the farmer cannot move his crops, which would be at the mercy of the enemy: thus he is peacefully inclined.

The first step towards the improvement of the negro is to induce him with a taste for agriculture; to show him that the earth will repay his labor, and that industry and peace will profit him more than war. Practice combined with preaching will be understood by the negro. If he can be assured of protection, and if he feels confident of obtaining justice, he will be in a fair condition for improvement. The first step necessary for the improvement of savage races is the establishment of a strong but paternal government. Negroes seldom think of the future. They cultivate the ground at various seasons, but they limit their crops to their actual wants; therefore an unexpected bad season reduces them to famine. They grow a variety of cereals, which, with a minimum of labor, yield upon their fertile soil a large return. Nothing would be easier than to double the production, but this would entail the necessity of extra store-room, which means extra labor; thus with happy indifference the native thinks but lightly of to-morrow. He eats and drinks while his food lasts; and when famine arrives, he endeavors to steal from his neighbors. There is an extreme love of independence in most savages, but especially among negroes. When they work at their fields they appear to be industrious, but this hard labor lasts for a short time, to be relieved by a period of idleness. Hunting and fishing are amusements eagerly pursued, but even in such sports, a fortunate day is followed by several days of relaxation. Nothing is so distasteful to the negro as regular daily labor: thus nothing that he possesses is durable. His dwelling is of straw or wattles; his crops suffice for a support from hand to mouth; and as his forefathers worked only for themselves and not for posterity, so also does the negro of the present day. Thus, without foreign assistance, the negro a thousand years hence will be no better than the negro of to-day—as the negro of to-day is in no superior position to that of his ancestors some thousand years ago.

There is no portion of the globe more blessed by nature than a great part of

Africa, especially the equatorial regions that I have lately annexed to Egypt. It is impossible to conceive a more beautiful country, combining unbounded capabilities. We frequently meet with magnificent scenery in Europe, such as we enjoy to view in Scotland or in other mountainous countries: but unfortunately such bold landscapes generally denote a sterile soil. In Central Africa we have every beauty of mountainous scenery, combined with the most fertile soil and healthy climate. There is an unlimited area with an average altitude above the sea of 4000 feet, which embraces all that man could desire. In the hands of Europeans this would become a mine of wealth. Never was a country so specially designed by nature for the production of coffee. In the country of Usui the coffee-shrub is indigenous. The sugar-cane is met with; but the natives only chew raw coffee and suck the juice of the cane, being as ignorant as their own rats of their proper uses. This ignorance extends to the want of appreciation of their country. They know nothing of its capabilities, neither do they care.

At the same time there is a large population divided into numerous tribes, who are constantly at war with each other. Taking advantage of the anarchy of Central Africa, the slave-hunters had an unbounded field for their operations. Thus a country which should be a paradise, was converted into an infernal region. Thousands of slave-hunters from the Soudan, organized as a military force, burnt, pillaged, massacred, and violated at discretion. Horrors hitherto unknown in savage countries were introduced. A country that I had seen in former years teeming with villages, and rich in native wealth, was rendered desolate. The young girls and boys were carried off into hopeless slavery. The old were massacred. The natives on all sides detested the sight of a stranger. Even a traveller was considered as the harbinger of some calamity.

This desolation was the result of the slave trade, and every abomination was committed in the name of "God and the Prophet."

My task was to bring this chaos into order. The first step necessary was to establish a government to give protection to the oppressed. This necessitated the

annexation of the country. The next step was to abolish the slave trade, and to drive the slave-hunters from the country. It was necessary to establish a line of military stations from Ismalia to Unyoro, a distance of 330 miles. Protection would ensure confidence among the natives. This once established, would be followed by general improvement. European seeds of vegetables, &c., were distributed among the tribes. These thrived luxuriantly. Agriculture was generally encouraged. The natives were forbidden to make war with other tribes without the sanction of the Government. Thus peace was established throughout a large extent of country. Legitimate trade was organized, instead of the pillage to which the natives had been accustomed. The slave-hunters were driven from the country at the point of the bayonet. A slight tax on corn was cheerfully paid for the support of the troops. The Government was established. For the first time in history, the Ottoman flag represented English ideas of liberty and justice, and was regarded by the natives as the symbol of protection.

In that distant portion of the Nile, in N. lat. $4^{\circ} 54'$, I left an excellent Missionary for the improvement of African savages. This is a power that will in a few years create an effect that could hardly be achieved by any other agent, a purely English Missionary—STEAM—which even during our own lifetime has been the great civilizing instrument of the world. As England first launched a steamer to cross the Atlantic, so have Englishmen built the first steamer at the last navigable limit of the Nile. This fine vessel of 108 tons, constructed of steel, by Messrs. Samuda Brothers, was carried in sections with incredible labor across the Nubian deserts for upwards of 400 miles on the backs of camels. She now, at a distance of nearly 3000 miles from the mouth of the Nile, represents the industry of the shipwrights who constructed her, and the enterprise of the Khedive of Egypt, whose name she bears. Another steamer is lying in sections at Gondokoro, ready for transport to the Albert N'yanza. When a steamer shall appear upon that vast lake, Africa will awaken from her sleep. The difficulties that have hitherto kept her in savagdom are those of transport. Those

difficulties will vanish. The Khedive is about to connect Khartoum with Cairo by railway. The White Nile will bring the produce of Central Africa to the terminus, and the great lake will form the nucleus for a trade, the dimensions of which will depend upon the integrity and honor of the Egyptian Government. By these means will Africa draw nearer to civilization.

In the late expedition that I had the honor to command, I feel that I have been the humble tiller of the ground; the seeds I have sown will, I trust, be nursed

by others until they shall bear fruit. This fruit I may not live to enjoy; but as England's colonial prosperity is the grand result of those first explorers who laid the sound foundations, I trust that in the work I have accomplished, the cause for which England has always striven will be advanced; and that when my name shall long have been forgotten, the prosperity of Central Africa, and the liberty of her people, may date from the Khedive of Egypt's expedition—which first crushed the abomination of the slave trade of the White Nile.—*Macmillan's Magazine.*

MR. SWINBURNE'S "BOTHWELL."

BY LORD HOUGHTON.

THE dramatic—perhaps melodramatic—passage of Lord Bothwell across the stage, in the last lines of "Chastelard," will have prepared the readers of Mr. Swinburne—that is, the English world of letters—for the appearance of this volume. It has been rumored to have been long ago completed, and the wondrous facility of production of which its writer is capable seemed to leave little excuse for the delay. But Mr. Swinburne would not be what he is, if he permitted the impatience of his friends to hurry him in the execution of a work to which he has given his whole heart and brain, and in which he is contending for the noblest prize in the intellectual competition of humanity—the fame of the mature poet who has accumulated and distributed the delightful treasures of a gifted youth, and retained the generative power of imagination in combination with the knowledge and experience of advancing years.

There is something unprepossessing in the form of the volume, and there will be many, even of those who do not look on the length of a book as the infallible measure of the labor of its production, whose first impression will be that of wasted energy and unnecessary research. But few will lay it down with this conviction. It must not be compared with its predecessor. The story of "Chastelard" was one of which history has told little, and of which poetry could make much; the incidents of

this drama are the world-stirring events of ten years of European history. The loves of Mary are no longer anecdotes of romance, they have become the troubles of peoples, the thoughts of statesmen, the fate of kings. It is no more the analysis of a mind, whose

"Subtlety lies close in her light wit,
And wisdom wantons in her wantonness,"

that fills the situation and satisfies the beholder; it is the contest of an imperious will with a complication of angry interests and pitiless passions, that demands to be accurately followed and truthfully reproduced in order to raise the work of the artist, above the uninteresting scene-shiftings of historical names and the arbitrary juxtaposition of fanciful characters, into an integral representation worthy of the subject. This, at least, appears to be Mr. Swinburne's earnest belief, and, while this treatment necessarily involves the careful sequence of events, the multiplicity of characters, and some of the repetition of daily life, the reader who desires the serious gratification of a complete poem will find in it no weariness, but gladly give to it the prolonged attention it requires and deserves.

The action, which begins with the death of the favorite and closes with the flight of the Queen to England, traverses not only the great scenes of the time, but moves incessantly from place to place, through every intermediate path

and incidental obstacle; and, if some such diversity is required in an ordinary piece to relieve the strain of attention by secondary impersonations and inferior interests, it is especially useful in such a work as Mr. Swinburne's, where the anxiety to give to every line its value and to every word its fullest force absolutely requires some occasional commonplace of passing circumstance to retain the impression of historical reality. He may be assured that in the dutiful humility to truth which he has here exhibited, his idealization has lost nothing, any more than any assumed absence of conventionality in morals and religion would suffer from the just delineations of the stately virtue of Murray and of the fierce piety of John Knox. It may indeed be that he has felt himself all the happier for the safe guidance of facts through the confusion of characters and events, as long as there was left to him the legitimate freedom of the delineation of his great heroine, whom the judgment of mankind, after two centuries of earnest inquiry, unable finally to acquit or condemn, may be said to have delivered over to his merciless imagination.

For it is a signal peculiarity in the historical position of Mary Queen of Scots, that, while the outward incidents of her short royal life are known with at least as much precision as many other events of the period, the sources of her action and motives of her conduct remain as much matters of conjecture and controversy as in the century of her captivity and death. There is, no doubt, almost sufficient cause for this uncertainty in the violence and rapidity of the events of which she was the centre, and the impossibility of tracing the progress of any individual mind through that storm of passions, interests, hopes, and fears. For instance, there is no character of the time that stands before us with so much integrity, in the sense of knowing what to do and doing it well, as that of the Regent Murray, and yet there are whole spaces of action in which we do not know where to find him. And if this is so with a determined and comparatively conscientious man, how can we look to trace with a credible accuracy the thoughts and feelings of a woman on many occasions necessa-

rily passive, and liable, to say the least, to the lower feminine impulses in times of free manners and rough indulgence? Had there even existed still stronger evidence than the few strange letters which all the teeth of ferocious antiquaries have not been able to tear to pieces, it is still improbable that the judgment of mankind respecting her would have been clear and definite. For after all it was and is not a question of vindication or excuse. The mighty religious struggle that was agitating the mind of Europe required that the Queen of Scotland should not only have that kind of justification which the spirit of the time was ready enough to accord to the vengeance and even insanities of princes, but that the champion of the True Faith in the northern portion of heretical Britain should be an innocent and outraged victim in the hands of infidel barbarians. There could be no discussion with such an opinion. To admit any indirect knowledge of her husband's murder, to suppose the least connivance with the rape of Bothwell, to believe in any lightness of conduct which could have aroused the suspicion of her people or the jealousies of her nobles, would have been an abandonment of one of the strongholds of Catholic hope and an act of religious treason. The long captivity that followed made of Queen Mary a sacred legend even in her lifetime, and her political execution became a Christian martyrdom. With this apotheosis on one side came not unnaturally strong reprobation on the other, and the fair demon of these pages is a sort of reprisal for the Catholic saint.

But the Mary of the opening of this drama is not the royal siren, fresh from pleasure-loving France, that drew Chastelard to destruction. Troubled with the wild rudenesses of her new land, and cruel in her native coquetry, she was yet gay at heart, and liking to please; and while sacrificing one lover to her own repute, she naturally consoled herself with the thought that she should have many more. But we have here the despotic woman, embittered by conjugal hatred and coarsened by sensual passion, looking on the world around and the people she has to govern, in this angry fashion:—

Queen. 'Tis but March,
And a scant spring, a sharp and starveling
year.
How bitter black the day grows! one would
swear
The weather and earth were of this people's
faith,
And their heaven colored as their thoughts of
heaven,
Their light made of their love.

Rizzio. If it might please you
Look out and lift up heart to summer-ward,
There might be sun enough for seeing and
sense,

To light men's eyes at and warm hands withal.

Queen. I doubt the winter's white is deeper
dyed

And closer worn than I thought like to be;
This land of mine hath folded itself round
With snow-cold, white, and leprous misbelief,
Till even the spirit is bitten, the blood pinched,
And the heart winter-wounded; these starved
slaves

That feed on frost and suck the snows for
drink,

Heating the light for the heat's sake, love the
cold:

We want some hotter fire than summer or sun
To burn their dead blood through and change
their veins.

And when, in the mutability that is the
essence of her nature, she tries to put
aside the phantoms of coming guilt and
shame, she knows that it is only by be-
coming something wholly other than she
is, that it is possible for her so to do.

Queen. I would I had no state to need no
stay;

God witness me, I had rather be re-born,
And born a poor mean woman, and live low
With harmless habit and poor purity
Down to my dull death-bed, a shepherd's wife,
Than a queen clothed and crowned with force
and fear.

Rizzio. Are you so weary of crowns, and
would not be,

Soon wearier waxen of sheepfolds?

Queen. Faith, who knows?

But I would not be weary, let that be
Part of my wish. I could be glad and good
Living so low, with little labors set
And little sleeps and watches, night and day
Falling and flowing as small waves in low sea
From shine to shadow and back, and out and
in

Among the firths and reaches of low life:

I would I were away and well. No more,

For dear love talk no more of policy.

Let France and faith and envy and England
be,

And kingdom go and people; I had rather
rest

Quiet for all my simple space of life:

With few friends' loves closing my life-days in
And few things known and grace of humble
ways

And still fields shutting fast my still thoughts
up—

A loving little life of sweet small works.

Good faith, I was not made for other life;

Nay, do you think it? I will not hear thereof:

Let me hear music rather, as simple a song,

If you have any, as these low thoughts of
mine,

Some lowly and old-world song of quiet men.

After the slaughter of Rizzio, almost in her
presence, even such tenderness as this dis-
appears. To get rid of Darnley and satis-
fy her passion for Bothwell are her daily and
nightly thoughts, and to accomplish these
objects she hardly consults the dictates of
ordinary prudence. Before her are the
jealousies of the nobles, the seething wrath
of the people, and the anathemas of Knox.
But no act of hers can make these much
worse than they already are; and there is
a specious advantage in the substitution of
Bothwell's warlike spirit and firm audacity
for her husband's debauched and frivolous
nature, which makes possible the impunity
of crime and excuses to her judgment the
requirements of her outraged pride and
importunate desires.

In carefully following out historical de-
tail, the poet must run the risk of having
to deal with characters unworthy of the
dignity of tragedy, and with situations im-
portant in results but ineffective in repre-
sentation, real in life but unsuitable to act.
What stronger proof of this difficulty
could there be than that which meets one
on the threshold of the play, the figure of
Darnley? History knows no good of him,
and yet he must be here; and therefore
Mr. Swinburne invests him with a pathos
that overcomes contempt, and makes "the
mockery of mismarried men" itself terrible,
rather than ludicrous. The murder of
Rizzio is vindicated by his belief not only
in the Queen's unlawful attachments (to
which the dramatist takes especial care to
give no sanction), but in the dominant
position he has assumed in her counsels,
and the all but regal functions with which
she has entrusted him. It is, then, no
vulgar foreign minstrel whose violent re-
moval forms the first link in this bloody
chain, but a subtle conspirator of Machia-
vellian wit, who advises her how either to
cajole such enemies as Murray into a false
security, or to smite them at once, and,
above all, no longer—

To leave the stakes in hand of a lewd boy,
A fool and thankless—and to save the game
We must play privily and hold secret hands.

His actual or intended elevation of an in-

trusive stranger to an office of so high a dignity as Chancellor of Scotland, would, in the political morality of the time, have made his assassination a patriotic act, if not a public duty. And the loyal, loving Ruthven in the very sickness of which "ere the year die" he "must be dead," who not foreseeing that his eyes will "fade among strange faces," yet feels that "having served her," he "should less be loth to leave" the "earth God made" his "mother," is the chief executioner. This is true tragedy.

While with relentless hand the Queen leads on Darnley to his deadly end, she veils her hatred with increasing duplicity, and turns his irresolute character as she wills. She makes him escape with her from Holyrood, makes him disavow his friends and accomplices, and when his vices have brought him to a sick bed in Glasgow, with her plausible kindness and feigned reproaches she subdues whatever manhood is left in him. He begs for pardon and restitution of place as husband and king, yet he seems to know that he pleads in vain: a dreadful consciousness of her true feeling towards him, and of his inevitable doom, reveals itself in occasional starts and struggles for independence, all the more angry for their very hopelessness. The last interview at Kirk o' Field is none the less Mr. Swinburne's own tor being faithful to the chronicle. He justly saw that no word of his could be devised as terrible as her authentic parting,—

"Twas just this time last year,
David was slain,—

or any imaginable accompaniment of Darnley's last night-watch could throw a more dramatic solemnity around its close than the old Psalm he is recorded to have read and applied to his own doom,—

Lo, here am I,
That bide as in a wilderness indeed
And have not wings to bear me forth of fear.
Nor is it an open enemy, he saith,
Hath done me this dishonor: (what hath put
This deadly scripture in mine eye to-night?)
For then I could have borne it; but it was
Even thou, mine own familiar friend, with
whom
I took sweet counsel; in the house of God
We walked as friends. Ay, in God's house it
was
That we joined hands, even she, my wife, and I,
Who took but now sweet counsel mouth to
mouth
And kissed as friends together. Wouldst
thou think,

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She set this ring at parting on my hand
And to my lips her lips? and then she spake
Words of that last year's slaughter. O God,
God,

I know not if it be not of thy will
My heart begins to pass into her heart,
Mine eye to read within her eye, and find
Therein a deadlier scripture. Must it be
That I so late should waken, and so young
Die? for I wake as out of sleep to death.
Is there no hand or heart on earth to help?
Mother! my mother! hast thou heart nor
hand

To save thy son, to take me hence away,
Far off, and hide me? But I was thy son,
That lay between thy breasts and drank of thee,
And I, thy son, it is they seek to slay.
My God, my God, how shall they murder me?

To raise the personality of Bothwell to a lofty historic pinnacle would be a violation of probability which Mr. Swinburne's adherence to facts would not permit. The poet is rightly content to leave him without moral purpose or intellectual dignity. But he can give him the virtues of his vices, and in the delineation of so audacious an enterprise as the possession of a beautiful sovereign and the Scottish throne, he may fairly suppose the existence of some such qualities as fascinated the former mistress and the future wife,—

Prythee, Reres,
Was he thus ever? had he so great heart
In those dead days, such lordliness of eye
To see and smite and burn in masterdom
Such fire and iron of design and deed
To serve his purpose and sustain his will?
Hath he not grown since years that knew me
not

In light and might and speed of spirit and
stroke
To lay swift hand upon his thought, and turn
Its cloud to flame, its shadow to true shape,
Its emptiness to fulness? If in sooth
He was thus always, he should be by now
Hailed the first head of the earth.

Lady Reres. It cannot be
But in your light he hath waxed, and from
your love,
Madam, drawn life and increase; but indeed
His heart seemed ever high and masterful
As of a king unkingdomed, and his eye
As set against the sunrise; such a brow
As craves a crown to do it right, and hand
Made to hold empire sword-like, and a foot
To tread the topless and unfooted hill,
Whose light is from the morn of majesty.

Queen. When mine eye first took judgment
of his face
It read him for a king born: and his lips
Touching my hand for homage had as 'twere
Speech without sound in them that bound my
heart
In much more homage to his own.

But Mr. Swinburne is as obscure as history is as to the origin and progress of the

Queen's passion. She is here represented as wholly his from first to last, and it is the evident purpose of the poet that she, false and fickle in all things else, outward or inward, should be entirely true to this affection,—

Faithful beyond reach of faith,
Kingdomless queen and wife unhusbanded,
Till in you reigning I might reign and rest.

The day comes when the first great obstacle to this object of two such resolute wills and untamed desires is swept away, and she and he stand beside Darnley's bier—a scene such as Mr. Swinburne's genius delights in painting,—

Queen. Let me look on him. It is marred not much ;

This was a fair face of a boy's alive.
Bothwell. It had been better had he died ere man.

Queen. That hardly was he yesterday ; a man !

What heart, what brain of manhood had God sown

In this poor fair fool's flesh to bear him fruit ?
What seed of spirit or council ? what good hope

That might have put forth flower in any sun ?
We have plucked none up who cut him off at root,

But a tare only or a thorn. His cheek
Is not much changed, though since I wedded him

His eyes had shrunken and his lips grown wan

With sickness and ill living. Yesterday,
Man or no man, this was a living soul ;
What is this now ? This tongue that mourned to me,

These lips that mine were mixed with, these blind eyes

That fastened on me following, these void hands

That never plighted faith with man and kept,
Poor hands that paddled in the sloughs of shame,

Poor lips athirst for women's lips and wine,
Poor tongue that lied, poor eyes that looked askant

And had no heart to face men's wrath or love,
As who could answer either,—what work now
Doth that poor spirit which moved them ? To what use

Of evil or good should hell put this or heaven,
Or with what fire of purgatory annealed
Shall it be clean and strong, yet keep in it
One grain for witness of what seed it was,
One thread, one shred enwoven with it alive,
To show what stuff time spun it of, and rent ?
I have more pity such things should be born
Than of his death ; yea, more than I had hate,
Living, of him.

Bothwell. Since hate nor pity now
Or helps or hurts him, were we not as wise
To take but counsel for the day's work here

And put thought of him with him underground ?

Queen. I do but cast once more away on him

The last thought he will ever have of mine.
You should now love me well.

But other impediments stand strong, and in truth they are such that, if the story of the time had remained in a legendary condition, no fancied contrivances for their removal could have been more fantastic or improbable than such as were adopted and were successful. Of the project of Bothwell to carry off the Queen by apparent force, Huntley, as chief actor, is well made here to say,—“It is too gross and palpably devised,”—words echoed by all historical criticism down to this our time. Will, again, any research ever explain that astounding document in which the Scotch nobility, almost to a man, not only assent to, but absolutely demand, the Queen's marriage with their unscrupulous rival and the husband of Jane Gordon ?

In the description of the marriage and the scenes that follow, Mr. Swinburne allows himself a poetic liberty which no one can grudge him. He becomes indeed a sterner moralist than even history warrants. From the moment the purpose of this defiance of the laws of God and man is attained, the retribution begins. She is wed in her old mourning habits, “and her face—as deadly as were they,” and for him,—

When the bishop made indeed
His large hard hand with hers so flowerlike fast,

He seemed as 'twere for pride and mighty heart

To swell and shine with passion, and his eye
To take into the fire of its red look

All dangers and all adverse things that might
Rise out of days unrisen, to burn them up

With its great heat of triumph ; and the hand
Fastening on hers so griped it that her lips

Trembled and turned to catch the smile from his

As though her spirit had put its own life off
And sense of joy or property of pain

To close with his alone ; but this twin smile
Was briefer than a flash or gust that strikes

And is not ; for the next word was not said
Ere her face waned again to winter-ward

As a moon smitten, and her answer came
As words from dead men wickedly wrung

forth
By craft of wizards, forged and forceful breath
Which hangs on lips that loath it.

And when Herries asks whether this may not have been done for show, to induce

the belief that the marriage was imposed by force, Melville replies,—

No, 'tis truth;
She is heart-struck now, and labors with herself

As one that loves and trusts not, but the man
Who makes so little of men's hate may make
Of women's love as little; with this doubt
New born within her, fears that slept awake
And shame's eyes open that were shut for love,
To see on earth all pity hurt to death
By her own hand and no man's face her friend
If his be none for whom she casts them off
And finds no strength against him in their hands.

The French ambassador, Du Croc, mentions the sad and desolate appearance of the Queen after her marriage. And her saying "she wished she were dead," is here enlarged into one of the most powerful scenes of the play, in which Bothwell reproaches her with babbling of her bonds, and lets her see he is not going to be the husband Darnley was, but her lord indeed.

Be you sure
I am not of such fool's mould cast in flesh
As royal-blooded husbands; being no king
Nor kin of kings, but one that keep unarmed
My head but with my hand, and have no wit
To twitch you strings and match you rhyme for rhyme

And turn and twitter on a tripping tongue,
But so much wit to make my word and sword
Keep time and rhyme together, say and slay.
Set this down in such record as you list,
But keep it surer than you keep your mind
If that be changing: for by heaven and hell
I swear to keep the word I give you fast
As faith can hold it, that who thwarts me here,
Or comes across my will's way in my wife's,
Dies as a dog dies, doomless.

It may be questioned whether the introduction on the stage of Bothwell's former wife merely that she may see him and Mary together before she fades out of sight for ever is not superfluous. It certainly brings an alien element into the drama without other meaning than that of making Mary exhibit her bitter jealousy of the cruelly abandoned lady, her former companion and friend. It would have been an improbable event, even in that atmosphere of improbabilities. For any resistance on his wife's part would have been justifiable, the Papal dispensation negating any pretence for the legal dissolution of the marriage on ground of consanguinity, having lately been found among the family papers at Dunrobin Castle. More light yet may be thrown

on the strange relations between her family and that of Bothwell; but as yet our knowledge of her and her sisters is very much confined to the ballad,—

The Lord of Gordon had three daughters,
Elizabeth, Margaret, and Jean,
They would not stay in bonny Huntly,
But they must go to bonny Aberdeen.

With the coming danger courage and confident love revive, and when Bothwell goes to sleep—that last sleep of freedom from which he is to wake to fly for his life—she, still watching, meditates—

'Tis a night
That puts our France into my mind; even here
By those warm stars a man might call it June
Were such nights many; their same flower-bright eyes
Look not more fair on Paris, than mine own
Again shall hardly look on. Is it not strange
That in this grey land and these grievous hours

I should so find my spirit and soul transformed
And fallen in love with pain, my heart that was
Changed and made humble to his loveless words

And force as of a master? By my faith,
That was till now fixed never and made as fire

To stand a sunlike star in love's live heaven—
A heaven found one in hue and heat with hell—
I had rather be mishandled as I am
Of this first man that ever bound me fast
Than worshipped through the world with breaking hearts

That gave their blood for worship. I am glad
He sometimes should misuse me; else I think

I had not known if I could love or no.

And when the lords threaten to raise the people on her, and bring her to justice for murder and adultery, she throws off the outward coil of meshes for once and for ever, and goes forth defiant to victory or death.

I had rather
Have looked on Actium with Mark Antony
Than bound him fast on Cydnus. O my hour,
Be good to me, as even for the doubt's sake
More than safe life I love thee; yet would choose

Not now to know, though I might see the end
If thou wilt be good to me; do thy work,
Have thine own end; and be thou bad or good,
Thou shalt not smite nor crown a queen in heart
Found lesser than her fortune.

For her the last two acts are the record of civil war and captivity. In the pres-

ence and peril of mortal conflict, the nature of Mary finds a satisfaction that the tumults, and even gratification of passion, failed to give, and the self-absorption that tainted all her other life is gone from her altogether.

Queen. That burgh below.
Is it not Preston Pans? These hills are set
As stages for the show of such high game
As is played out for God's content on earth
Between men's kings and kingdoms; yet I
think
He that beholds hath no such joy o'er the
game
As he that plays, nor can the joy be known
Save of man only, that man has to play
When the die's throw rings death for him or
life.
How clear the wind strikes from the mount-
ing sun—
I am glad at heart the day we have of fight
Should look thus lively on both sides that
meet
Beneath so large an open eye of heaven.

When the issue of the battle is sealed,
when there is no other salvation for Both-
well but her own surrender, she hardly
hesitates. After her terrible cry—

Ah God, that we were set
Far out at sea alone by storm and night
To drive together on one end, and know
If life or death would give us good or ill
And night or day receive, and heaven or earth
Forget us or remember!

she bids him go—

It is not I would hold you
Is he got to horse?
I do not think one can die more than this.

Then turning on the lords with a storm of
imprecations, she is borne back to Edin-
burgh—still undaunted:—

If she die not till she die for fear,
She must outlive man's memory; twice or
thrice
As she rode hither with that sable flag
Blown overhead whereon the dead man lay
Painted, and by him beneath a garden tree
His young child kneeling, with soft hands
held up
And the word underwritten of his prayer
Judge and avenge my cause, O Lord—she seemed
At point to swoon, being sick with two days'
fast,
And with faint fingers clung upon the rein
And gaped as one athirst with foodless lips
And fair head fainting; but for very scorn
Was straightway quickened and uplift of heart,
And smote us with her eyes again, and spoke
No weaker word but of her constant mind
To hang and crucify, when time should be,
These now her lords and keepers; so at last
Beneath these walls she came in with the
night,

So pressed about with foes that man by man
We could but bring her at a foot's pace through
Past Kirk of Field between the roaring streets,
Faint with no fear, but hunger and great rage,
With all men's wrath as thunder at her heel
And all her fair face foul with dust and tears,
But as one fire of eye and cheek that shone
With heat of fiery heart and unslaked will
That took no soil of fear.

It is interesting to compare the fascina-
tion of the old Hebrew world on Mr.
Swinburne, Hellenist as he is, with the
same combination of influences on the
genius of Heinrich Heine. He, indeed,
was a Jew first, and a Greek afterwards,
till the physical agony of his later years
drove out the happy phantoms of pagan
life, and, as he said, "Jehovah conquered
him." The religious associations of our
English poet here stood him in stead of
the Oriental nationality, and the fellow-
singer of Baudelaire walks at home in the
streets of Jerusalem crying, "Woe! woe!"
with burning ashes on his head. Thus
suitably the speech or sermon of John
Knox fills many pages of awful imagery
and furious speech, telling the tale of
Mary as would a prophetic scripture, with
the addition of a fierce irony which thus
recalls the memory of Chastelard:—

Folk that came
With wiles and songs and sins from over sea,
With harping hands and dancing feet, and
made
Music and change of praises in her ear—
White rose out of the south, star out of France,
Light of men's eyes and love! yea, verily,
Red rose out of the pit, star out of hell,
Fire of men's eyes and burning! for the first
Was caught as in a chamber snare and fell
Smiling, and died with *Farewell, the most fair*
And the most cruel princess in the world—
With suchlike psalms go suchlike souls to
God
Naked—and in his blood she washed her feet
Who sat and saw men spill it; and this reward
Had this man of his dancing.

After this no wonder that the citizens
cry—

If by their mouths to-day
She be set free of death, then by our hands
She dies to-morrow.

Here, indeed, the tragedy of the queen
and Bothwell closes, and the last act, which
tells of the escape from Lochleven Castle
and the field of Langside, seems rather to
be a link with something yet to come than
the fit conclusion of so great a drama.
For the spirit in which Mary takes refuge
in England is by no means that of submis-
sion to her destiny, and resignation of

her rights and rule. She anticipates her return as an avenger of her own wrongs and those of her faith in all that splendor of invective, of which Mr. Swinburne is so great a master, that he should be somewhat more temperate in its use. For it is surely not true to art, whatever it may be to nature, to lower the ideal of a character which the action of a piece has elevated, and so make nugatory whatever individual sympathy or interest it may have won. Mary, having risen from the false and wilful woman into something heroic by a brave self-abandonment and absorbing love, leaves the scene a pitiless bigot and bloodthirsty termagant.

I will make
From sea to sea one furnace of the land
Whereon the wind of war shall beat its wings
Till they wax faint with hopeless hope of rest,
And with one rain of men's rebellious blood
Extinguish the red embers. I will leave
No living soul of their blaspheming faith
Who war with monarchs; God shall see me
reign
As he shall reign beside me, and his foes
Lie at my foot with mine; kingdoms and
kings
Shall from my heart take spirit, and at my soul
Their souls be kindled to devour for prey

The people that would make its prey of them
And leave God's altar stripped of sacrament
As all kings' heads of sovereignty, and make
Bare as their thrones his temples.

Perhaps this censure strikes an inherent defect in Mr. Swinburne's poetical conception, which it is useless to criticize if it is ineradicable, and which it would be ungrateful to insist on too much, when we see its conjunction with so many merits. But there must be a limit to "the spirit that denies," or there would be no more Fausts; and if even a moderate amount of good is impossible, there is no longer any humoristic elements in its opposite.

It will be an advantage to our critical literature if this conscientious work puts a stop to the small cavils against Mr. Swinburne's defects of style and occasional mannerisms. Even where they are evident, they have never implied anything more than an excess of metrical force and ingenuity of expression. In the varied and affluent diction of this poem they are altogether lost, and the simplicity of the narrative portion is as great a success as its melodious imagery and dramatic passion.
—*Fortnightly Review*.

THE ROMANCE OF THE JAPANESE REVOLUTION.

VISITORS to the Vienna Exhibition were grievously disappointed at one part of the promised show. They had been told that all the nations and peoples of the remote orient would come crowding in the wake of their miscellaneous exhibits to the palace of industry on the semi-oriental Danube. They came in faith and hope, to see few signs of anything of the kind. There were no flowing draperies in silk or flowered calico, no jewelled turbans or high-crowned caps of fur. If there were any Pagan visitors from the Tartar steppes, they were so completely disguised *en Chretien* that there was no detecting them. If there were gentlemen from the Caucasus or the Persian frontier, they had dismantled themselves of their ambulant armories, and left their cartridge-quilted vests at home. The Anglicised Hindoo was conspicuous by his absence. We believe there was but a single Chinaman, and he was on duty in the department of the Flowery Land; nay, even the Osmanli from the neighboring Bosphorus had not been stir-

red sufficiently from his habitual apathy to trouble himself to undertake the easy voyage by rail and steamboat. *En revanche*, there was one strange type of nationality you met at every turn—small, slight-made men, with olive complexions and black twinkling eyes slit almond-fashion. But on their way to Vienna they had probably passed by Paris, and were dressed in such garments as are to be procured at the Belle Jardinière or the Bon Diable, with tall chimney-pot hats that came well down upon their foreheads. They had taken wonderfully kindly to these new clothes of theirs, and yet there was something about them that told you they were masquerading cleverly. On the first glance you were conscious of an impression you had seen them somewhere before, and then it gradually dawned on you that it was on porcelain vases and lacquered cabinets you had met them. For these were the Japanese, the sprightly children of "the Land of the Rising Sun;" and it was not only in the ease with which they had slipped into

their European clothes that they showed their happy faculties of adaptation. They were little versed as yet in foreign tongues; they knew next to nothing of German gutturals. But there they were, working their way about everywhere, giving the freest play to their inquiring minds, and dispensing for the most part with interpreter or cicerone. They hopped on behind the crowded tramway cars with an utter absence of the dignity we regard as the birth-right of oriental blood; they submitted to be jostled and trodden upon with as little sign of temper or prejudice as the good-humored Viennese themselves; they bartered their base Austrian coin for conductors' tickets as if they had been accustomed to street railways from their boyhood. You saw them everywhere, because they had been sent so far upon their travels at the Government expense, to act on the maxim of the sage Bacon. Travel with them was indeed a part of education, and they were studying men as much as things. The shrewd interest shown in their sharp eyes seemed never to flag for a moment; the flesh might sometimes be weary, but the spirit was always willing. If they had shipped any prejudices with them in Japan, they had thrown them overboard on the outward voyage. High-caste Hindoos, even if they had consented to come across the "black water," would have thought themselves contaminated had they been brought in contact with unbelievers at their meals. The Chinaman would have shown himself all abroad had he not been permitted to bring his chopsticks into society. But these Japanese gentlemen frequented the French restaurants, and gulped down Drecher's beer in the Austrian "breweries" like all the rest of the world; they handled our knives and forks as if they had been to the fashion born, and, in short, behaved themselves in every respect like easy and liberal men of the world.

To those who remarked the ease and *aplomb* of their bearing, it seemed scarcely credible that they came from a country that had maintained itself in the most churlish isolation until within the last twenty years: a country so jealously self-contained that until the other day permission to leave it would have been denied to its highest dignitaries. We know how an Englishman looks when he sets his foot for the first time in a strange city—half

shy, half suspicious, moving about in a chilling atmosphere of repulsion which numbs his good-fellowship and faculties, and obscures his vision. Frenchmen may be more versatile and impressionable, yet fugitive impressions disappear from their casing of vain self-complacency, like breath from a plating of polished steel. These Japanese rubbed their eyes when they woke up in a new world of wonders, and there they were, wide awake at once. Their lively brains must have been in a perpetual whirl of excitement, but surprises stimulated instead of stunning them. They came to Europe eager to learn, and from the first day of their landing they began to do like the Europeans. The imitation of externals came naturally to them: they were quick at catching up the manners and customs of the people who jostled them. They acted like a shrewd man who finds himself in more refined society than he has been used to, and is not sure of the ways of his company. They observed and copied with smiling self-confidence and an off-hand assumption of original action. They were learning from everything around them without an appearance of effort; and under their *insouciant* exterior, they were remodelling their minds with marvellous rapidity. Whether minds so mobile, and made of material so plastic, are the best materials for forming a great nation and founding a stable power, is another question. It is at least certain that these Japanese were the genuine representatives of that spirit of progress or innovation which is hurrying the ancient empire of the Mikadós towards a future that no one can foretell.

Had the Japanese been a nation of quick and docile barbarians, we could better understand all that has passed among them of late years. But until Americans and Europeans bombarded them into the brotherhood of nations, they had been conservative to bigotry, and with no little reason. The past they are now impatient to break with was one of which any untravelled people might well be proud; and it was odd enough that, at the moment when they were flocking to Vienna, they were playing a game of cross purposes with the most advanced nations of the Western world. While they were doing their best to denationalize themselves with astounding success, we Europeans were servilely copying their

arts, and humbly confessing that our attempts at imitation were failures. Wherever you moved about among the ornamental works of the Exhibition—especially among the ceramics, the wood-carving, and the precious metals—you saw Japanese ideas in the ascendant. If there were extraordinary grace in an outline, or wonderful delicacy in a fabric, you might be pretty sure that it was borrowed from the Japanese. Although there are follies in fashions, and our connoisseurs have launched into many an absurd extravagance since Dutch monsters fetched fabulous prices, in the early days of the Hanoverian dynasty, there could be no mistake about the æsthetic purity of this fashion. In the court of the Japanese you could judge for yourself of the admirable superiority of their models. You crossed the threshold to find yourself in an artistic fairyland, where fancy might be said to have run the wildest riot, had it not been subordinated so invariably to the sense of the beautiful. There was much that was grotesque, for rich drollery and quaint humor abounded. There was a great deal of ingeniously imagined deformity: but in the grotesqueness there was never anything to scandalize, and often the deformity had its positive fascination. Everywhere the perfect elaboration of the patient execution did ample justice to the vigorous originality of the design. The monsters, marine and terrestrial, exquisitely moulded in brass or bronze, were instinct with life; while, fabulous or not, they impressed you with a conviction of the general correctness of their anatomy. The snakes and lizards coiling themselves on the covers of vases, or twining themselves into handles or hinges, looked like nature itself in all their fantastic contortions. There was a world of expression in the eyes of the elephants and the sagacious curl of the animals' trunks. As for the fabrics of the famous pottery-ware, the coloring of the painted flowers and the tints of the plumage of the birds, they were the envy and despair of Staffordshire potteries and Parisian artists. With all their taste, appliances, and experience, neither Deck in France nor Mr. Binns in England could surpass, or even equal, the delicate ivory of the Sutsuma-ware, with its waving lines, or the red and grey of the exquisite Kago. No European fingers had the nicety to manipulate those mi-

nute *plaques* of gold that were wrought into those wondrous designs on the exquisitely-finished cabinets; while the *repousse*-work on vases, caskets, and incense-burners was inimitable in its delicacy. Painting, no doubt, was in its infancy with them. They had crude notions of perspective; they had not gone on educating themselves through successive centuries to develop schools and styles; nor did they show any of the highly-varnished canvases we hang on the walls of academies and *salons*. With them the painter was rather in the pay of the upholsterer and house-decorator. They dashed in a pattern in outline on screens and hangings, with men and heads, birds and fishes, fruits and flowers. But in the measure and within the scope of their designs, they showed something more like genius than talent. There were flights of water-fowl streaming through the air, there were fishes cleaving the water. There was but a line, a dot, or a shadow here and there to convey the idea of water or the atmosphere. It eluded your critical sagacity altogether to discover how the artist had conveyed so easily the idea of motion, lightness, and buoyancy; but there could be no mistake about the vivid reality of your impressions. And yet the collection that excited the admiration of connoisseurs only indicated faintly the extent and value of the art-treasures of the Japanese empire; for the rage for Japanese art has prevailed among us for a good many years, and dealers and brokers have picked up most that was for sale, and transferred it before now to wealthy amateurs. It is true that the Government, when it decided on exhibiting, advertised for industrial objects, to be produced regardless of cost. But the Mikado and the great nobles were not likely to strip their palaces and risk their most treasured objects on a perilous sea-voyage, even in order that they might raise the reputation of their country in the opinion of remote barbarians. Such as the exhibition was, however, it showed you sufficient to indicate the existence of an old civilization of a very high character; for when a country has made such advances in the arts, it implies a strong social organization, refined tastes, and the leisure and security to indulge them. Anarchy and irresponsible despotism arbitrarily exercised, are altogether incompatible with the calm thought and patient la-

bor that for many centuries had been working those precious materials into those costly heirlooms. There had been wars and troubles in Japan, no doubt,—indeed the Japanese have been a military nation *par excellence*; and the sword was the most honored of all the professions, for the military caste took rank after the nobles. But the manner of conducting wars and feuds may be a proof the more of the progress and spirit of a nation; and these ancient vases and cabinets must either have been saved by sound engineering from siege and storm, or been spared by the victors in a spirit of appreciation, or else by capitulations honorably observed.

The Japanese have notoriously been a nation of warriors, and that in all probability was the reason why the exhibition was so surprisingly pacific in its character. They have just been fighting out their revolution in a sharp series of civil wars; throwing aside the weapons that served their fathers and used to satisfy themselves, and snatching eagerly at those that were offered them by European traders. Of late years it was European war-steamers and field-pieces, Sniders, Enfields, powder and cartridges, that figured most conspicuously among the imports at the treaty ports; but as yet they had scarcely found time to establish gun-factories for themselves, and so they had nothing to exhibit among native productions by way of competing with Essen or Woolwich. Yet one warlike object they did exhibit, and a very significant one. For it was eloquent of the marvellous transitions they are passing through, as well as of the extraordinary dangers which beset the foreigners who have settled among them. The chain-armor of a Japanese foot-soldier, with the plumed morion to match, had slipped in somehow among the china and the cabinets. It embodied in itself many of the odd contrasts and inconsistencies which still strike the stranger in Japan, although they are fast disappearing before revolutionary legislation: it reminded you of the recent vitality of that formidable, aggressive, and reactionary feudal system which consented of a sudden to its own happy despatch in the very flush of a crowning victory. It expressed the intense antagonism of the immemorial institutions of Japan to that trading spirit which has carried all before it, imbuing to all appearance in a few short years the natural leaders of the feudal aristocracy of

the empire. It was eloquent of the romantic side of the Japanese life and manners, which in their very picturesqueness were a standing menace to strangers. It recalled the times—they are only of yesterday—when the streets, highroads, and houses of entertainment swarmed with the swordsmen retainers of the daimios; when these men, who, by training and tradition, were utterly reckless of life and consequences, regarded every foreigner they set eyes upon as the symbol of all that was most vile and objectionable; when the country was infested by bands of masterless men-at-arms, something of a cross between the knight-errant and the *condottiero*. Chain-armor of this kind was going out of fashion with us when the Black Prince and his father won Crecy and Poitiers; morions of the sort have been out of date since the wars of the Long Parliament; but they were the uniform worn by the soldiers of Chosiu and Satsuma when they were settling their domestic differences the other day, within range or hearing of the rifled guns in our ironclads. The armor of yesterday is relegated to-day to museums, with all the antiquated institutions it symbolised; but the men who wore it can scarcely have changed their natures, or renounced the feelings inculcated as the religion of their caste.

Japan has always been enveloped in mystery, thanks to its jealous policy of exclusion; and now that its ports are thrown open to us, it is more of a mystery than ever. The story of our intercourse with it during the last quarter of a century has resembled in all respects a historical romance. It has abounded in sensations and startling surprises. It has been a succession of plots cleverly contrived to puzzle us, and of which we scarcely yet hold the clue. The grand *dénouement* is to come, and the best-informed observers are watching for it in hopeless mystification. As for exciting episodes, they are endless. Peaceful diplomats have been sitting and negotiating under keen-edged swords that have been literally suspended by threats. Merchants have been pushing their trade in the teeth of prejudices, and in defiance of threats,—buying and selling on the treacherous edge of an abyss. Now the country is apparently inundated with European ideas, and the loyal subjects of the galvanised Mikado

are supposed to have renounced their most cherished prejudices, and to have taken for their models foreigners and traders—the people they detested, following a calling they despised. But to measure the movement, and to estimate the dangers our countrymen have so far tided over in comparative safety, we must glance at what we know of the condition of the empire before the recent revolution and fall of the Shogun.

There are a good many excellent works on the subject—excellent, at least, according to their authors' light at the time of writing; for we have gradually been fathoming the depths of our ignorance. But of the works that have been written, there is none, perhaps, that gives a more thorough insight into Japanese society than one of the lightest and least pretending—Mitford's 'Tales of Old Japan.' One veracious native history like that of the "Forty-seven Ronins" is worth any quantity of speculative commentary on passing events, hit off superficially from the European point of view. The features in the national character and institutions, brought out by Mitford in the boldest relief, are precisely those that would make the events that have been happening lately under our eyes appear most improbable. We see a martial spirit in the ascendant everywhere: the soldier class ranking after the nobles; the agriculturist taking precedence over the ingenious artisan; and the trading counterpart of the foreign settlers occupying the lowest place of all. We see the central Government, with which foreigners would naturally treat, divided against itself; while powerful feudatories, paying but an illusory allegiance to their liege lord, overshadowed the throne altogether, and carried the system of decentralisation to an extreme. We see the patriarchal principle almost more absolute than it ever was among ourselves in the Highlands of Scotland; the system of clanship in the fullest force, with a self-sacrificing devotion on the part of the clansmen so sublime as sometimes to border on the ludicrous. The point of a tragic story of ten lies in the grim humor with which a vassal gravely insists on despatching himself for a mere bagatelle—for nowhere perhaps do men part more lightly with their lives than in Japan. Not only do the Japanese possess the passive indifference to death of the Chinaman, who will

make a bargain for his life as for anything else that belongs to him; but they have the active and high flown-courage which inspired the fantastic chivalry of our middle ages. Setting their personal feelings out of the question altogether, the very idea that the foreigners were objects of detestation to their lords, with the knowledge that their being under the protection of the Government made it a somewhat dangerous matter to meddle with them, was quite sufficient to provoke the swagging Samurais to undertake the adventure of cutting down individuals. No doubt assassination and attempts at assassination occurred not unfrequently. The only marvel is, that massacres have not been universal, and that either the legations or the mercantile communities have survived so far to see their perseverance rewarded.

Take the tale of the "Forty-seven Ronins" by way of illustrating our argument. The Ronins, who figure so conspicuously in Japanese legends, are, to borrow the old Scotch phrase, "broken men"—literally "wave men"—who, by some crime or accident, are masterless for the time being, and who have taken to living by sword and stirrup, in defiance of the law, and at war with society. The famous Forty-seven were part of the following of a high dignitary of the Shogunate. Being thrown on the world by his untimely and violent death, they banded themselves together in secret to avenge him. Their unfortunate master had been condemned to the *hara-kiri*—solemn suicide, with all the forms of state ceremony—for attempting to right a wrong of his own within the sacred precincts of the Shogun's palace. They vowed to carry out the work that their master had been interrupted in; but his enemy and theirs was wary and vigilant, and formidably guarded in his fortified residence. In their loyalty they deliberately decided to sacrifice their own careers, their lives, their character, their happiness, and their tenderest affections. To disarm suspicion, their leader betakes himself to a life of low debauchery, haunts houses of ill-fame, and rolls about the public ways in a state of swinish intoxication. Nay, more, he quarrels with his dearly-loved wife when she remonstrates; and to make sure that his part shall be played out to perfection, he does not take

her into his confidence. On the contrary, he divorces her with abusive words, sending her away sorrowing, to the scandal of their grown-up family. So much for the preparation; and the circumstances of the night attack, when it comes off at last, are scarcely less significant of the national manners. The palace to be assailed is in the crowded metropolis of Yeddo; and the Forty-seven send round the quarter to warn its inhabitants not to be alarmed should they hear a disturbance. The formal announcement runs thus: "We, the Ronins, who were formerly in the service of Asano Takumi no Kami, are this night about to break into the palace of Kôtsuké no Suké, to avenge our lord. As we are neither night robbers nor ruffians, no hurt will be done to the neighboring houses. We pray you to set your minds at rest." Accordingly, not a soul stirs, although the desperate fight is maintained for hours. For the bodyguards of Kôtsuké no Suké showed themselves just as stanch as the Ronins, and, taken by surprise as they were, they fight it out till they fall to a man. The palace is carried, and its occupant ferreted out, hiding himself in rather ludicrous circumstances. Yet the chief of the Ronins, warm from the fray, in spite of his inveterate animosity and the contemptible appearance presented by his trembling victim, makes it a point of honor to resume the calm dignity of a warrior's training. He is exceptionally punctilious in observing the forms of humble respect due to a superior. He briefly recalls the circumstances that have brought about the present catastrophe, apologising with much courtesy for the disagreeable necessity to which he and his companions have been driven, and respectfully prays the wounded nobleman to execute the "happy despatch," volunteering himself for "the honor" of acting as second. Kôtsuké, however, won't hear of this. He is one of those rare characters in Japanese legend or history—a coward who even shrinks from death when it is inevitable. So he figures passively in place of actively as principal in the drama that is hastily enacted, and the Ronins evacuate his palace, carrying off his head. It is their intention to offer it on their master's tomb. Although the city is all in excitement by this time, no one attempts to obstruct their retreat. It is understood

that the head of their late master's family has got his retainers all under arms, ready to come to their support if necessary. He will protect them from the populace, or the followers of other princes; he even offers them a banquet of honor; yet he will not interpose between them and the law. Their lives were devoted beforehand, and they had counted the cost when they swore themselves to the desperate adventure. They feast themselves solemnly with "gruel" and wine before completing their pious work, by offering the head of his enemy to the manes of their master. Then they calmly await their fate in the sanctuary where they had taken refuge, although the country is before them, and they can fly if they please. The sentence comes at last in an order that the whole forty-seven shall perform hara-kiri. They have knowingly broken the law, and there is no remitting the penalty. But, although divided in their deaths, they are once more reassembled in an honored sepulchre, around the master they loved so well; and from that day until now their memory has been revered, and they have been worshipped.

Now this is no picturesque legend of another and earlier state of society, like an exploit of Robin Hood, or Rob Roy, or even of some highwayman on Bagshot Heath. Until the other year, if not to the present day, the unfaltering loyalty of the warlike Samurais to their feudal lords was similar in kind, if not in intensity, to that which has immortalised the Forty-seven Ronins. Suicides on the point of honor were just as common lately as then, and were often committed with far less reason. Thus Mr. Mitford tells us how, so late as 1868, a man had solemnly disembowelled himself among the graves of the Ronins, simply because he had been refused admission among the followers of the Prince of Chosiu; and no one seemed to think the proceeding anything but natural. An individual act may be prompted by fanaticism or insanity; but there is no misinterpreting the annals of the recent wars. One of the most striking incidents we can recall is furnished by the repeated revolts of that Prince of Chosiu, the warlike and turbulent daimio of Naguto. Chosiu took the field in 1864 with fifty thousand men; and of course, in any ordinary war, the men he nourished would naturally follow him. But he flew at high game,

and actually assaulted the palace of the Mikado. Now the explanation of the late revolution offered by Iwakaura, the present premier, and other leading politicians, is, that it has its springs in the profound reverence of the nation for the person and office of the Mikado—a reverence which survived the usurpation of his authority by the Shoguns during a period of seven hundred years. Yet Chosiu's troops stood by him in his deed of sacrilege, and they fought gallantly, though the assault failed. The Shogun and the daimios in alliance with him turned out, and came to the rescue. Chosiu had to succumb to the forces of the League; he and his son shaved their heads and retired from public life to sanctuary in a temple, just as the beaten monarchs of early Christian monarchies were sometimes permitted to withdraw into convents. His contrition and submission were both feigned; but, to give a lively color to them, and to carry off his part successfully, he informed his great officers who had headed his troops that it was his pleasure they should perform *hara-kiri*. Then he duly transmitted the heads of these stanch friends of his to the Shogun by way of vouchers. A more cruel, cowardly, and treacherous proceeding—one better fitted to alienate the affections of the most loyal subjects—it is difficult to conceive. Yet in the following year, when he was again in the field, his men followed him as loyally as ever, although the military odds were all against him, and although, in the disturbed state of the country, they could have deserted him with absolute impunity.

But in truth, not only was there blind devotion among the men-at-arms to their immediate chiefs, but a most deferential submission among all classes to those above them. First came the nobles, then the soldiers, then the agriculturists, artisans, traders. The men who tilled the ground held high honor comparatively in the social hierarchy; but they submitted in resigned acquiescence to the imposts of their landlords, until sometimes when their burdens became at last absolutely intolerable. To venture on remonstrance or appeal needed heroism almost as self-sacrificing as that which animated the Ronins; and next to the tale of the Forty-seven, the story in Mitford which is most characteristic is that of the ghost of Sakurá.

Sôgorô is head-man of a village in a district which is being ground to the dust by exactions. The miserable inhabitants take heart of grace and petition their lord, who is an absentee proprietor residing in Yeddo. They take nothing by their petition but a warning not to do it again. Driven to desperation, Sôgorô, knowing full well what he has to expect in any case, resolves on appeal to the Shogun, stops him as Richie Moniplies stopped King James, and thrusts a petition into his litter. The "sifflication" is favorably received, the truth of its contents being admitted on inquiry—things must have come to a melancholy pass with the villagers before such an act of insubordination was approved—and the lord is commanded to do justice. He dare not disobey the Shogun, but Sôgorô is his, to deal with as he pleases; nor does the Shogun, in the full plenitude of his power, feel it his province to interpose for the unlucky villager's protection. Sôgorô is condemned to crucifixion, with his wife and family. The population of the district he has saved are full of sympathy, although not greatly surprised. Sôgorô is a lost man, they see; indeed, his life is forfeited by custom, if not by law. But they make an effort to save his wife and children, and nothing can be more thoroughly Japanese than the quaint wording of their petition. "With deep fear we humbly venture"—"With reverence and joy we gratefully acknowledge the favor," squeezed out of this vindictive lord—"With fear and trembling we recognise the justice of Sôgorô's sentence." Sôgorô has been "guilty of a heinous crime." "In his case we reverently admit there can be no reprove."

In fact, when we established relations with Japan, it was a federation of feudal despotisms, administered more or less benevolently according to the individual dispositions of the daimios, and all nominally subjected to the Shogun, who was despotic within his own territories, and so far as his power extended beyond them. The great daimios resided for a good part of the year in Yeddo, the Shogun's capital, in vast palaces that covered whole quarters. The barracks of potentates like Satsuma or Chosiu had accommodation for 10,000 or 15,000 men, and were often overflowing. And these formidable bodyguards were not regularly drilled and disciplined troops. They were reckless

swashbucklers, idle and penniless, for their bread literally depended on their masters, and they subsisted on the daily rations of rice by which their masters measured their incomes. We have seen how lightly life is held by all classes; and these men were trained from their boyhood to show contempt for death. Not a man of the gentlemen among them but had been regularly instructed in the ceremonial of the *hara-kiri*, with the view of dying with dignity and credit should he ever be condemned to solemn suicide. The Japanese youths were taught to die, as boys with us are taught to dance. Not a man among them but would have thought himself honored at being singled out to commit an assassination on his prince's behalf, and who would not have felt his mission the more flattering had he been commanded to make himself a scapegoat, and keep his prince's counsel. They were far quicker to take murderous hints than the duller brains of the Barons to whom Henry spoke so plainly, when he longed to be rid of the overbearing Beckett. Without hints of any sort they understood the spirit of their masters' minds, and knew they could rely upon the protection of their clansmen should they come home red-handed after cutting down a foreigner. Even when they went abroad with no particular design—when they were swaggering about in the tea-houses with those naked blades of theirs, the keener of which are warranted to cut through three corpses at a blow—the temptation to have a slash at a passing foreigner must often have been almost irresistible. As we remarked before, the wonder is, not that foreigners were occasionally slaughtered, but that a single individual of them was suffered to exist. When a crime was committed, and the Shogun declared, in answer to remonstrances, that his justice was baffled, it is more than likely that he generally spoke the truth. It might have puzzled a daimio to detect a culprit among the crowd of his followers, although, no doubt, had he declared that a scapegoat was wanted, there would have been keen competition for the honorable service.

Such were the daimios and their retainers when the American and European war squadrons were prevailing on the Shogun to give us access to the country. So long as the daimios were courteous to the Shogun, and spoke reverentially of the Mikado,

they had pretty much *carte blanche* to do as they pleased even in Yeddo. In their own dominions they were absolute. They were very bigoted; the chief of them were very rich; they had good reason to be satisfied with the island-empire they had locked themselves up in; they dreaded change; they detested foreigners, and especially despised them in their capacity of traders, the capacity in which the strangers claimed admission to Japan. They had formed their idea of Europeans, Christians, and traders, from the Dutch they penned up in Nagasaki harbor,—for their intercourse with the Portuguese was an old story. The abject submission of these Dutch strangers must have confirmed the Japanese in their contempt for the trading classes. For the sake of profit, the Dutch had consented to all manner of inflictions and restrictions; and it had been the consistent policy of the authorities to degrade them in the eyes of the people. They were shut up in an artificial island; they had to send a solemn deputation annually to play the mountebanks in the presence of the Mikado by way of court ceremony; they were said to have renounced their religion by trampling on the symbol of their salvation, although that may have been calumny. So when Commodore Perry sailed his squadron into Yeddo Bay in the summer of 1853, the Japanese no doubt believed that he brought a fresh batch of humble petitioners for toleration. They were quickly undeceived, and the American took a bold line from the first. He spoke as equal to equal, with an insinuation of unknown resources in reserve that was calculated to impress an intelligent people. On shore he could have done nothing, and the followers of a daimio of the third class might have disposed of the party of marines he might have landed. But then, on the other hand, he was invulnerable at sea. There his squadrons were floating in the hitherto inviolate waters of the Empire, flaunting their dragon pendants with the stripes and stars, and resolutely declining to be put off with speeches, either soft or imperious. He was mistaken, like the rest of the world, as to who was the legal sovereign; but he was aware that the Shogun was actual ruler, and he declined to enter into negotiations with anybody but officials of the highest rank. There he was, and there he seemed likely to stay. For the Japanese

had no navy in their archipelago, although the light coasting vessels that scouted about their enemy's ships were models of grace and skilful construction in their way.

We have no intention of even sketching in outline the history of negotiations since the Americans first broke ground in their straightforward fashion. We will only repeat that they went the right way to work with their practical sagacity; and very soon—such was the force of their example—the Dutch actually got up from their knees, and provoked a snub by their sudden change of demeanor. In the earliest days of foreign interposition, we think we can comprehend the progress of thought and the shifting relations of parties in the empire. The Mikado had nothing to say in the matter, and probably neither he nor his Court nobles felt any great interest in it. The Shoguns had administered the realm for centuries, and it was the province of the Shoguns to deal with those importunate barbarians. The daimios were disgusted with the overweening pretensions of the new arrivals; they detested them heartily, with the strange forms of civilisation they had imported, and they resented the Shogun not having got rid of them at once. As for the Shogun, he was very sensible of the increasing pressure he was being subjected to. Sharp and intelligent like all his countrymen, he made it his business to find out what forces those intrusive foreigners could dispose of, and to discover whether they were in a position to make good their promises. For while they hinted that he must be coerced in case of recalcitrancy, they were very eloquent as to all he would gain were he only to give in to them with a good grace. At first, unquestionably, it was his purpose to get credit with his countrymen by throwing dust in the strangers' eyes, for his position was excessively delicate and dangerous, as events have proved. As the strangers would not be blinded, he had to choose the lesser of two evils: he went in for the speculative alternative of obtaining for himself and his country great gains by means of trade, at the risk of provoking unpopularity and strong animosities. We talk of the Shogun, for such seems to have been the successive policy of the men who filled the office while foreigners had anything to do with them. But in those few years the Shoguns changed fast. An acting regent was assassinated in broad day close to the

very gates of his palace; while one, if not two others, died under strong suspicion of poison. But in reality it was the last of the Shoguns—the instigator of that audacious assassination of the regent—who voluntarily embodied in his conduct the policy that had been forced on his predecessors by the very decided line he adopted. He hurried matters to the crisis that crushed the Shogunate.

Yoshi Hisha, a prince of the family of Mito, began to be so firmly persuaded of the profits of this foreign connection, that he fell under the suspicion of desiring to monopolise them for his own advantage. Seventeen years had elapsed since Commodore Perry's arrival in Japanese waters, and the daimios all the time had been in process of conversion to European ideas. Satsuma had been bombarded in his capital of Kagosima. A descent had been made on Chosiu's territories, in retaliation for his firing upon passing shipping; his batteries had been spiked in the straits of Nagasaki, and the obstructions cleared away that he had laid down in their intricate channel. The daimios had learned the value of European weapons, and the comparative worthlessness of their own. They had begun to buy armor-plated steamers and rifled guns; but each was nervously apprehensive that his neighbor might get the start of him. What chance had a body of irregular swordsmen clothed in chain-armor, with regularly-drilled battalions armed with breech-loaders? And there was the Shogun at headquarters treating directly with the foreigners; increasing a strength they were already jealous of, and which had no superstitious sanction, like that of the Mikados. He made concession of treaty ports after a great show of resistance, and all of them were in territories that were under his personal control. The eighteen great feudatories could only conduct their transactions with the strangers through the intermediacy of the Shogun's officers; the Prince of Satsuma being perhaps an exception, for he always kept himself on a somewhat exceptional footing. At first these feudatories had been as bitterly opposed to new-fangled innovations as our English squires when their properties were threatened by the railway companies. Now, like the Englishmen, when they saw that money was being lavished all around them, they recognised their mistake, and tried to re-

trieve it. They were eager for opening treaty ports of their own; and the Shogun, who saw that discontent was rife, and war imminent in any case, was more resolved than ever not to concede these. Were the war to break out, arms might counterbalance numbers, and he had no idea of renouncing what advantage he possessed in the way of obtaining superior equipments. Already it appeared that the warlike prince of Nagato had managed to get the start of him in that respect, probably in great measure by way of contraband trade, if trade may be called contraband when the rebellious potentate was strong enough and bold enough to carry it on in defiance of his superior.

While the Shogunate was being threatened by this formidable coalition, it occurred to both parties to turn to the Mikado. In the seven hundred years of the Shogunate it had been the interest and policy of the reigning Shogun to ignore the *empereur fainéant* of Kioto; and this policy of neglect had succeeded so well that the daimios had come to regard the Mikado as a phantom. When Lord Elgin and Baron Gros had treated with the Shogun as supreme sovereign, that usurping dignitary had left them in their mistake; and when the treaties were solemnly signed and sealed, no one else had cared to undeceive them. Indeed, what had once been usurpation had since been sanctioned by time and custom; and if prescription and acquiescence go for anything in a matter of the kind, the Shogun was sovereign by acquiescence of the Mikado. If might as well as right had remained with the Shoguns, we should have heard nothing of reviving the temporal supremacy of the Mikados. But the intercourse with the foreigners had shaken the political and social relations of the country to their foundation. The influence of the Shogun had depended not so much on his personal territorial power as on a solidarity of interest with the most powerful daimios; for the Shogunate was not hereditary in a single family, but elective among four of the leading houses. Now the daimios being divided against themselves, the Shogun who was their chief began to totter. The hostile daimios had bethought themselves of flying the Mikado's flag, thus turning the tables on the Shogun, and declaring him a rebel *de jure*. The last but one of the Shoguns was a lad and a puppet, but those who ad-

vised him made counter-advances to the Mikado in self-defence, thus accepting the false position the hostile daimios had made for them. The last of the Shoguns, elected from a rival family—he was a cadet of the powerful family of Mito—was a singularly clear-sighted man, and probably he discerned the signs of the times as plainly as anybody. He accepted office with pretended reluctance; by certain stipulations he insisted upon, he admitted himself to be merely a viceroy and commander-in-chief, charged with carrying out the wishes of the Mikado and leading the forces of the empire. He was ambitious, no doubt, or he would not have put himself forward in these troublous times; but his ambition was regulated by sound judgment. By taking office on the terms he did, he opened for his ambition a double alternative. Things might settle back into the old position, in which case he might again be governor *de facto*, as his predecessors had been. Or if the Shogunate was doomed, as was much more likely, he might resign his state without loss of dignity, and still remain the foremost man in the country, administering affairs as minister of the Mikado. It would only be exchanging his residence in Yeddo for a residence in Kioto.

Things turned out as he probably expected, and we need not trace their history. The Shogun was driven to abdicate, but he had to abdicate under the pressure of unsuccessful campaigns, and far too late for the fulfilment of that alternative hope of his. The victors spared his life and his property; and although he has since been recalled to inferior office, it is probable that he has passed from the history of Japan. One sharp successful war had dispossessed him. A second campaign disposed of his north-eastern allies, who had tried to revenge and restore him, in their jealousy of the south-western daimios. The Mikado remains, nominally, absolute master; actually, exercising such an authority as none either of his predecessors or of the Shoguns had ever exercised in the long annals of the empire. He—or his advisers—lost not a moment in putting his newly-regained powers to the test. They struck while the metal was hot with a vengeance, and sent showers of sparks flying over the length and breadth of the country, that might have caused explosions everywhere among a far less inflammable people. Yet, until the other day, everything passed off

peaceably; and now we are assured that the recent disturbances are a mere question of the popularity of a foreign war. We ask ourselves question upon question, and can find satisfactory answers to none of them, if we are to judge by historical precedent elsewhere, or our ideas of human nature all the world over. Who were the real promoters of the revolution? Were they the four great daimios whose names have been put forward so conspicuously, or were they adroit wire-pullers in humbler ranks, who made use of their great men for their own purposes? What was the spell they used to subvert the most sacred institutions, to conciliate the feelings and the prejudices, of the nation? Did it all originate—as we are told it originated—in a profound veneration for the Mikado's person and office? How came it that the victorious daimios were prevailed upon to execute a happy dispatch—to part with their authority and their lands, and their formidable military following? Then there are a variety of other questions, with respect to the future, scarcely less interesting, and of more practical consequence. We should be glad to know, for example, who are the real rulers of the country; what is the actual state of feeling under the apparent calm; how the foreigners are regarded, for they have undoubtedly been at the bottom of everything; what has become of the hordes of disbanded swordsmen whose occupation is gone, and who are reduced to penury; whether the secularised and disendowed priests of a once popular religion still retain their hold on their devotees, and are disposed to preach a holy war by invoking the support of the interests that have suffered. And last, but not least, comes the financial question; indeed it must take precedence of all the others, in states that rank as Japan aspires to do. Will the new financial machinery, so suddenly improvised, support the strain of those heavy burdens that are the consequence of this general imitation of all things European?

On all these points we own we can hazard nothing better than conjecture; and it is the very uncertainty in which they are involved that has induced us to call attention to affairs in Japan. The most trustworthy authorities frankly confess themselves puzzled, while more credulous individuals are content to accept Japanese explanations—which is simply absurd.

Only time can elicit the truth, and time is likely to bring it out speedily, if matters keep moving as they have been doing hitherto. It is possible that some of these problems may be left unsolved for the benefit of posterity, for we are never likely to have better means of forming an opinion than at present—and at present we are all abroad—as to the action of the insurgent daimios, for instance, and the use they made of the Mikado's name. Iwakaura, the present prime minister, volunteered an explanation to Baron Hübner, the Austrian *diplomate*, whose account of Japan is the best that has lately been published. Iwakaura's explanation was that the Shogunate had been accumulating a heavy load of unpopularity, while the principle of veneration for the Mikado had remained profoundly rooted in every heart in the country. In other words, it only needed an appeal to that veneration to work miracles when by a sudden process, resembling that of religious revivals in our own country, it softened simultaneously the hearts of all the daimios in a moment of intense political agitation, and made them sacrifice, in evidence of their sincerity, everything they had most dearly cherished. These unselfish converts to a patriotic principle commenced their revolt with a combined attack on the palace of the Mikado, and a violation of the sanctity of his sacred person. Having once mastered his person, they sent out their proclamations in his name; and in the ecstatic sublimity of its reviving faith, the country resigned itself to the most revolutionary measures, ignoring all that was suspicious in the transaction. We may grant readily enough that the people prudently pretended a faith they did not feel, and shrank from trying conclusions with the forces of the victorious princes. But what are we to think of the conduct of the daimios themselves? The Princes of Satsuma, Chosiu, Hitzen, and Tosa had overthrown the Shogun, apparently because he was menacing their feudal authority, or at least because he seemed likely to increase his own in virtue of his more intimate relations with the strangers. And the first step they took after this victory was to resign all they had been fighting for, and infinitely more than any one would have dreamed of exacting of them, even had they been prostrated in a series of disastrous campaigns. They volunteered

the abolition of the feudal system, to which they owed their very existence. They offered guarantees for their sincerity by resigning the bulk of their vast territories into the possession of the Crown. They surrendered their valued titles of honor. They consented to receive Crown *préfets* into their hereditary dominions, to administer them absolutely in the name of the central authority. In further proof of straightforward dealing, they consented to direct upon Yeddo all the troops they did not disband, with all that *matériel* of war whose costly accumulation had probably been at the bottom of the overthrow of the Shogun.

Let us admit, for the sake of argument, that the four leaders of the movement did all this for a blind—that they knew they could make better use of their men and *matériel* at the capital than in their outlying dominions. The admission is quite inconsistent with the fact that six-and-thirty other daimios, openly opposed to the movement, or else outsiders, imitated them blindly. The memorable document, the protocol of the political *hara-kiri* they were executing, was drawn up by the Minister Kido, who has taken a leading part in the revolution all along. Till then Kido had been a simple Samurai of the Prince of Chosiu, and his remarkable ability and sagacity are beyond all dispute. This is one of the passages embodied in his famous State paper: "The place where we live is the property of the Mikado, and the food we eat is grown by his subjects. How then can we make the land we possess our own?" It is as audacious a bit of humor as we have ever come across, considering what manner of men they were whose ideas it professed to embody. These were the men who had made themselves unconstitutionally absolute in the course of seven hundred years, and it was late in the day to ask so delicate a question without a syllable of apology for deferring it so long. Yet if the daimios have been playing a game hypocritically in their own ambitious interests, it must be admitted that the game is a very desperate one. They had so very little to gain, and so very much to lose. Only one of them could attain to a dictatorship, and that he could not make hereditary; while the rest have in any case taken a step they cannot recede from, even should they care to provoke a counter-revolution.

There is no restoring a feudal system that has been the gradual growth of centuries. They have broken up their clans, and subverted the castes on which their feudal supremacy depended. Their disbanded swordsmen are seeking service in the national army, or betaking themselves to the agriculture and handicrafts they used formerly to despise. Either they have been hoodwinked into the most unparalleled act of abnegation recorded in history, or in their short-sighted ambition they have been guilty of a most egregious and suicidal piece of folly.

It is possible that their self-sacrifice may be for the permanent benefit of the empire; and that Japan may date a new era of prosperity from the self-denying ordinance promulgated by its nobles. In the course of half-a-dozen years, Japan has transformed itself into a civilized kingdom, and has advanced itself more decidedly in many respects than some of the ancient monarchies of Europe. It has State Councils and Privy Councils—a house of representatives, subdivided into committees; it has sixty-six *arrondissements*, each with its *préfet*; it has railways and telegraphs, mints and educational establishments with European professors; it has sent its legations abroad, resident or with roving commissions; and it has a national debt that bids fair to increase rapidly if the credit of the country holds good. But if the successive coatings of civilized varnish have not been laid on far too quick, the atmosphere of Japan must be altogether exceptional. The revolution was in no sense a popular one, whatever its promoters may allege. If the people have the vigor of intellect they are credited with, the country must be pregnant with the elements of discontent and disturbance. There are the inferior daimios, whose teeth have been filed and whose claws have been cut, and who must begin to repent their surrender when they become conscious of their comparative impotency. There are the priests of Buddha, who may consider the permission to marry but poor compensation for the loss of the endowments and offerings they could have afforded to marry upon. There are the lower orders, who used to flock in crowds to the temples of Buddha, and who are now commanded to go back to the established church, and return to the more orthodox worship of Shinto. There is the vexatious

imposition of increased taxes, which must be rigorously enforced if the Government is to pay its way. In old times the feudal vassals paid contributions in kind; and they paid nothing or very little when the rice crop was a failure. In old times it was only the agriculturists who paid, and the industrial and commercial classes escaped altogether. Now, all are rated alike. Nor is the Government content to interfere merely with the consciences and the pockets of its subjects—both of them points on which men are extremely sensitive all the world over. It extends its initiatory regulations to their persons, and nothing is too great or too small to be legislated for in elaborate detail. Nowadays the greatest nobles are denied the liberty of living where they please. Formerly, they were bound to spend half the year in the capital of the Mikado; now, they must pass the whole of the twelve months there, and are forbidden to reside on their patrimonial domains. It may be right to put a stop to the sale of young girls, and to restrict the unbounded license of divorce. But it was a strong measure to lay down sumptuary laws for the ladies' toilets, and to compel every Japanese to cut his top-lock and let his hair grow all over his head. These miscellaneous measures of all sorts and sizes may be right and wise in themselves, or they may not. But this much seems certain, that no nation with a real capacity for progress and self-education can sit down complacently and contentedly under legislation at once so trivial and imperious.

In making our rapid summary of the vested interests that have been injured or outraged, we have left one class for special mention, because our countrymen settled in Japan are specially concerned in its future. We have no means of estimating the numbers of the disbanded Samurais. We only know that each of the daimios used to entertain a host of these irregulars, according to his degree and the extent of his revenues; that, as we said, Satsuma and Hitzen thought nothing of bringing fifty thousand men into the field, or of keeping a fifth of that number on permanent garrison duty at Yeddo. And we know that, roughly speaking, the new national army, including the line and the imperial guard, consists of no more than some thirty infantry battalions. A few of the Samurais have taken service with the

Government; the rest are thrown on their wits and the world. These are the men who would have turned Ronins a few years ago, roaming the country in search of reckless adventure. Some very inadequate provision has been made for them by the legislature, and they are officially recommended to betake themselves to more peaceful professions. Even were they ready and willing to do so, it must be long before industrial society could absorb so many individuals utterly unfitted by previous training for ordinary work. But in reality, work of any kind must be intensely repugnant to their training and tastes. It is derogating from their superiority of caste, and renouncing their *esprit de corps*. Agriculture is relatively respectable; but it can scarcely be pleasant for a Court swashbuckler to exchange the sword for the spade. As for handicrafts, they are contemptible, and commerce is still more so. Thus these men who are strong enough to coerce the community, and who possibly might get the better of the troops of the state in spite of breech-loaders and rifled field-pieces, have everything in the world to gain by a revolution. Even domestic disturbances or a foreign war would restore them in the mean time their old occupation. And in the event either of a revolution or an *émeute*, what would be their feelings towards foreign merchants and the foreign legations? for it is certainly foreign interference that has turned their world upside down.

So far as we can judge, a knot of able and pushing statesmen are the only persons who as yet have profited by the changes, and all of these are adventurers more or less. There are Iwakura, who is Provisional Prime Minister; and Sanjo, who was President of the Council. Both are men of the first rank and connections, but they are both taken from the class of the Kugos or nobles of the Court of the Mikado, and the Kugos had neither the territorial influence nor warlike following of the daimios. There is Kido, whom we have already spoken of, perhaps the ablest of them all; and there is Okuma. Kido came to power as delegate for the Chosiu clan, as Okuma for the Hijien, and Itagaki for the Satsuma; and previous to the revolution, Kido was nothing but an ordinary Samurai, while Okuma was a humble student on his promotion. Whether they worked upon more powerful men or were

put forward by them, it appears clear that at the present moment they actually direct the State policy. In other words, the formidable elements of the old society are being dexterously set off against each other, by sleight-of-hand or shrewdness of brain. The recent troubles are said to have arisen out of the question of the Corea war, and it is reported that they have been pretty nearly suppressed. Yet the symptoms were very ominous. There was an attempt to assassinate Iwakaura, which nearly proved successful; and men who are well informed assure us that the mutiny in the island of Kiusiu is believed to have been fomented by those princes of Satsuma, Tosa, and Chosiu, who already begin to repent the precipitate surrender of their feudal powers. Be that as it may, it is certain that the disbanded Samurais

must have set their hearts upon a foreign war, and that the pacific policy of the present Minister must have gone far to aggravate the prevailing discontent. We hope the best, because everything we have lately seen of them assures us that the Japanese have great capabilities for improvement. But just because they have great capabilities, because they have shown themselves thoughtful and intelligent, with quick feelings and earnest convictions, we can hardly help apprehending the worst. The Ministry who have made the revolution must understand their countrymen far better than we do, and may be able to guide it through shoals and breakers. In any case, the progress of events must speedily give us a clue to the *dénouement* of the historical drama.—*Blackwood's Magazine*.

JOHN BUNYAN.*

BY THE DEAN OF WESTMINSTER.

"As I walked through the wilderness of this world I lighted upon a certain place where was a den." These words have been translated into hundreds of languages, and hundreds and thousands in all parts of the world and all classes of mankind have asked, "Where was that place, and where was that den?" and the answer has been given that the name of the "place" was Bedford, and that the "den" was Bedford gaol.† This it is which has given to the town of Bedford its chief—may I say, without offence, its only title to universal and everlasting fame. It is now two hundred years ago since Bunyan must have resolved on the great venture—so it seemed to him—of publishing the work which

has given to Bedford this immortal renown; and Bedford is this day endeavoring to pay back some part of the debt which it owes to him.

It has seemed to me that I should best discharge the trust with which I have been honored—and a very high honor I consider it to be—by saying a few words, first on the local, then on the ecclesiastical and political circumstances, and then on the universal character of your illustrious townsman.

1. I shall not, in speaking of the local claims of Bunyan, surrender without a struggle the share which England at large has in those claims. Something of a national, something even of a cosmopolitan color, was given to his career by the wandering gipsy life which drew the tinker with his humble wares from his brazier's shop, as well as by the more serious circuits which he made as an itinerant pastor on what were regarded as his episcopal visitations. When I leave Bedford this evening in order to go to Leicester, I shall still be on the track of the young soldier, who, whether in the Royal or the Parliamentary army—for it is still matter of dispute—so narrowly escaped the shot which laid his comrade low; and from the siege of its ancient walls gathered the imagery

* This address was delivered at Bedford on Wednesday, June 10, 1874, on the occasion of unveiling the statue of Bunyan.

† "As it has been questioned whether the 'Den,' at the beginning of the 'Pilgrim's Progress,' means the gaol at Bedford, the following note may not be without interest:—The second edition, London, 1678, has no marginal note on the passage. The third edition, London, 1679, has as a note 'the gaol.' This was published in Bunyan's lifetime, and is, therefore, an authority. In the same edition there is a portrait in which Bunyan is represented as reclining and asleep over a den, in which there is a lion, with a portcullis."—*Notes and Queries*, June 20, 1874.

for the "Holy War" and the "Siege of Mansoul." When it was my lot years ago to explore the Pilgrims' Way to Canterbury, I was tempted to lend a willing ear to the ingenious officer on the Ordnance Survey, who conjectured that in that devious pathway and on those Surrey downs the Pilgrim of the seventeenth century may have caught the idea of the Hill Difficulty and the Delectable Mountains. On the familiar banks of the Kennett at Reading I recognise the scenes to which tradition has assigned his secret visits, disguised in the slouched hat, white smock frock, and carter's whip of a waggoner, as well as the last charitable enterprise which cost him his life. In the great Babylon of London I find myself in the midst of what must have given him his notion of Vanity Fair; where also, as the Mayor has reminded you, he attracted thousands round his pulpit at Zoar Chapel in Southwark, and where he rests at last in the grave of his host, the grocer Strudwick, in the cemetery of Bunhill Fields.

But none of these places can compete for closeness of association with his birthplace at Elstow. The cottage, or what might have been the cottage of his early home—the venerable church where first he joined in the prayers of our public worship—the antique pew where he sat—the massive tower whose bells he so lustily rang till struck by the pangs of a morbid conscience,—the village green where he played his rustic games and was haunted by his terrific visions,—the puddles in the road, on which he thought to try his first miracles—all these are still with us. And even Elstow can hardly rival the den,—whether the legendary prison on the bridge or the historical prison not far from where his monument stands,—for which the whole world inquiringly turns to Bedford. Most fitting, therefore, has it been that the first statue erected to the memory of the most illustrious citizen of Bedford should have been the offering of the noble head of the illustrious house to which Bedford has given its chief title. Most fitting it is that St. Peter's Green at Bedford should in this way—if I may use an expression I have myself elsewhere employed—have been annexed to the Poet's Corner of Westminster Abbey, and should contain the one effigy which England possesses of the first of human allegorists. Claim him, citizens of Bedford and inhab-

itants of Bedfordshire; claim him as your own. It is the strength of a county and of a town to have its famous men held in everlasting remembrance. They are the links by which you are bound to the history of your country, and by which the whole consciousness of a great nation is bound together. In your Bedfordshire lanes he doubtless found the original of his "Slough of Despond." In the halls and gardens of Wrest, of Haynes, and Woburn, he may have snatched the first glimpses of his "House Beautiful." In the turbid waters of your Ouse at flood time he saw the likeness of the "River very deep," which had to be crossed before reaching the Celestial City. You have become immortal through him; see that his glory never fades away amongst you.

2. And here this local connection passes into an ecclesiastical association on which I would dwell for a few moments. If Elstow was the natural birthplace of Bunyan, he himself would certainly have named as his spiritual birthplace the meeting-house at Bedford and the stream of the Ouse, near the corner of Duck Mill Lane, where he was in middle life re-baptized. There, and in those dells of Wainwood and Samsell, where in the hard times he secretly ministered to his scattered flock, he became the most famous preacher of the religious communion which claims him as its own. The Baptist or Anabaptist Church, which once struck terror by its very name throughout the states of Europe, now, and even in Bunyan's time, subsiding into a quiet, loyal, peaceful, community, has numbered on its roll many illustrious names—a Havelock amongst its soldiers, a Carey and a Marshman among its missionaries, a Robert Hall among its preachers, and I speak now only of the dead. But neither amongst the dead nor the living who have adorned the Baptist name is there any before whom other churches bow their heads so reverently as he who in this place derived his chief spiritual inspirations from them; and amongst their titles to a high place in English Christendom, the conversion of John Bunyan is their chief and sufficient guarantee. We ministers and members of the National Church have much whereof to glory. We boast, and we justly boast, that one of our claims on the grateful affection of our country is that our institutions, our learning, our liturgy, our version of the Bible, have sus-

tained and enlarged the general culture even of those who dissent from much that we teach and from much that we hold dear. But we know that even this boast is not ours exclusively. You remember Lord Macaulay's saying that the seventeenth century produced in England two men only of original genius. These were both Nonconformists—one was John Milton, and the other was John Bunyan. I will venture to add this yet further remark, that the whole of English literature has produced only two prose works of universal popularity, and both of these also were by Nonconformists—one is the work of a Presbyterian journalist, and it is called "Robinson Crusoe;" and the other is the work of a Baptist preacher, and its name is the "Pilgrim's Progress." Every time that we open those well-known pages, or look at that memorable face, they remind us Churchmen that Nonconformists have their own splendid literature; they remind you Nonconformists that literature and culture are channels of grace no less spiritual than sacraments or doctrines, than preaching or revivals. There were many Bishops eminent for their piety and learning in the seventeenth century; but few were more deserving of the name than he who by the popular voice of Bedfordshire was called Bishop Bunyan.

3. And now, having rendered honor to whom honor is due—honor to the town of Bedford, and honor to my Nonconformist brethren,—let me take that somewhat wider survey to which, as I have said, this occasion invites me; only let me, before entering on that survey, touch for an instant on the contrast which is presented by the recollections of which we have just been speaking, and the occasion which brings us here together. There are certain places which we pass by in the valley of life, like to that which the pilgrim saw, in which two giants dwelt of old time, "who," he says, "were either dead many a day, or else, by reason of age, have grown so crazy and stiff in their joints that they now do little more than sit at their cave's mouth grinning at pilgrims as they go by." It is at such a cave's mouth that we are today. We see at the long distance of two hundred years, a giant who, in Bunyan's time, was very stout and hearty. What shall we call him? His name was Old Intolerance, that giant who first under

the Commonwealth, in the shape of the Presbyterian clergy, could not bear with "the preaching of an illiterate tinker and an unordained minister," and then, in the shape of the Episcopal clergy, shut him up for twelve years in Bedford gaol. All this is gone for ever.—But let us not rejoice prematurely: the old giant is still alive. He may be seen in many shapes, on all sides, and with many voices. "The spirit of burning and the spirit of judgment" have not, as some lament, altogether departed either from Churchmen or from Nonconformists. But his joints are very stiff and crazy; and when on this day the clergy and the magistrates of Bedford are seen rejoicing in common with their Dissenting brethren, at the inauguration of a memorial of him who once suffered at the hands of all their spiritual forefathers, it is a proof that the world has, at least in this respect, become a little more Christian, because a little more charitable and a little more enlightened—a little more capable of seeing the inward good behind outward differences.

An excellent and laborious Nonconformist, who devoted his life to the elucidation of the times and works of Bunyan, describes, with just indignation, the persecuting law of Charles II., under which John Bunyan was imprisoned, and he then adds, "This is now the law of the land we live in." No, my good Nonconformist brother, no, thank God! it is not now, nor has for many a long year, been in force amongst us. In the very year in which John Bunyan died, that Revolution took place to which, when compared with all the numerous revolutions which have since swept over other countries, may be well accorded the good old name "Glorious," and of which one of the most glorious fruits was the Toleration Act, by which such cruelties and follies as the Conventicle and Five Mile Acts became thenceforth and for ever impossible. That Act was, no doubt, only the first imperfect beginning; we have still, even now, all of us much to learn in this respect. But we have gained something; and this day is another pledge of the victory of the Christian faith, another nail knocked into the coffin of our ancient enemy. It required a union of many forces to effect the change. If it was Barlow, Bishop of Lincoln, that befriended John Bunyan in prison, it was Whitehead,

the Quaker, whom, in his earlier days, Bunyan regarded as a heathen and an outcast, that opened for him the doors of Bedford gaol; and those doors were kept open by the wise King William III., by the Whig statesmen and Whig prelates of the day, and not least, by the great house of Russell, who, having protected the oppressed Nonconformists in the days of their trial, have in each succeeding generation opened the gates of the prison-house of prejudice and intolerance wider and wider still. Let it be our endeavor to see that they are not closed again either in Bedford or anywhere else.

4. Thus much I have felt constrained to say by the circumstances, local, ecclesiastical, and political, of this celebration. But I now enter on those points for which chiefly, no doubt, I have been asked to address you, and from which alone this monument has acquired its national importance. The hero of Elstow was great, the preacher in the Baptist meeting-house of Bedford was greater, but, beyond all comparison, greater was the dear teacher of the childhood of each of us, the creator of those characters whose names and faces are familiar to the whole world, the author of the "Pilgrim's Progress." And when I speak to you of Bunyan in this his world-wide aspect, I speak to you no longer as a stranger to the men of Bedford, but as an Englishman to Englishmen; no longer as a Churchman to Dissenters, but as a Christian to Christians, and as a man to men throughout the world. In the "Pilgrim's Progress" we have his best self—as superior to his own inferior self as to his contemporaries. It is one of the peculiar delights of that charming volume that when we open it all questions of Conformity or Nonconformity, of Baptists or Pædobaptists, even of Catholic and Protestant, are left far behind. It is one of the few books which acts as a religious bond to the whole of English Christendom. It is, perhaps, with six others, and equally with any of those six, the book which, after the English Bible, has contributed to the common religious culture of the Anglo-Saxon race. It is one of the few books, perhaps almost the only English book, which has succeeded in identifying religious instruction with entertainment and amusement both of old and young. It is one of the few books which has struck a chord which vibrates

alike amongst the humblest peasants and amongst the most fastidious critics.

Let us pause for an instant to reflect how great a boon is conferred upon a nation by one such uniting element. How deeply extended is the power of sympathy and the force of argument, when the preacher or the teacher knows that he can enforce his appeal by a name which, like that of an apostle or evangelist, comes home as with canonical weight to every one who hears him; by figures of speech which need only be touched in order to elicit an electric spark of understanding and satisfaction. And when we ask wherein this power consists, let me name three points.

First, it is because the "Pilgrim's Progress," as I have already indicated, is entirely catholic—that is, universal in its expression and its thoughts. I do not mean to say—it would be an exaggeration—that it contains no sentiments distasteful to this or that section of Christians, that it has not a certain tinge of the Calvinist or the Puritan. But what is remarkable is that this peculiar color is so very slight. We know what was Bunyan's own passionate desire on this point. "I would be," he says, "as I hope I am, 'a Christian,' but as for those factious titles of Anabaptists, Independent, Presbyterian, or the like, I conclude that they come neither from Jerusalem nor Antioch, but from hell or Babylon." It was this universal charity that he expressed in his last sermon, "Dost thou see a soul that has the image of God in him? Love him, love him. This man and I must go to heaven one day. Love one another and do good for one another." It was this discriminating forbearance that he expressed in his account of the Interpreter's Garden. "Behold," he says, "the flowers are diverse in stature, in quality, in color, in smell, and in virtue; and some are better than some; also where the gardener has set them there they stand and quarrel not with one another." There is no compromise in his words, there is no faltering in his convictions; but his love and admiration are reserved on the whole for that which all good men love, and his detestation on the whole is reserved for that which all good men detest. And if I may for a moment enter into detail, even in the very forms of his narrative, we find something as universal

as his doctrine. Protestant, Puritan, Calvinist as he was, yet he did not fear to take the framework of his story and the figures of his drama, from the old mediæval Church, and the illustrations in which the modern editions of his book abound, give us the pilgrim with his pilgrim's hat, the wayside cross, the crusading knight with his red-cross shield, the winged angels at the "Celestial Gate," as naturally and as gracefully as though it had been a story from the "Golden Legend," or from the favorite romance of his early boyhood, "Sir Bevis of Southampton." Such a combination of Protestant ideas with Catholic forms had never been seen before, perhaps never since; it is in itself a union of Christendom in the best sense, to which neither Catholic nor Protestant, neither Churchman nor Nonconformist can possibly demur. The form, the substance, the tendency of the "Pilgrim's Progress" in these respects may be called latitudinarian, but it is a latitudinarianism which was an indispensable condition for its influence throughout the world. By it, as has been well said by an admirable living authority* learned in all the learning of the Nonconformists, John Bunyan became the teacher, not of any particular sect, but of the universal Church.

Secondly, this wonderful book, with all its freedom, is never profane; with all its devotion, is rarely fanatical; with all its homeliness, is never vulgar. In other words, it is a work of pure art and true genius, and wherever these are we mount at once into a freer and loftier air. Bunyan was in this sense the Burns of England. On the tinker of Bedfordshire, as on the ploughman of Ayrshire, the heavenly fire had been breathed which transformed the common clay, and made him a poet, a philosopher—may we not say a gentleman and a nobleman in spite of himself. "If you were to polish the style," says Coleridge, "you would destroy the reality of the vision." He dared (and it was, for one of his straitened school and scanty culture, an act of immense daring) to communicate his religious teaching in the form of fiction, dream, poetry. It is one of the most striking proofs of the superiority of literature over polemics, of

poetry over prose, as a messenger of heavenly truth. "I have been better entertained and more informed," says Dean Swift, "by a few pages of the 'Pilgrim's Progress,' than by a long discourse on the will and the intellect." "I have," says Arnold, "always been struck by its piety. I am now equally struck, and even more, by its profound wisdom." It might, perhaps, have been thought that Bunyan, with his rough and imperfect education, must have erred—as it may be he has sometimes erred—in defective appreciation of virtues and weaknesses not his own; but one prevailing characteristic of his work is the breadth and depth of his intellectual insight. For the sincere tremors of poor Mrs. Muchafraid he has as good a word of consolation as he has for the ardent aspirations of Faithful and Hopeful. For the dogmatic nonsense of Talkative he has a word of rebuke as strong as he has for the gloomy dungeons of Doubting Castle; and for the treasures of the past he has a feeling as tender and as pervasive as if he had been brought up in the cloisters of Oxford or Westminster Abbey.

When (if I may for a moment speak of myself) in early youth I lighted on the passage where the Pilgrim is taken to the House Beautiful to see "the pedigree of the Ancient of Days, and the rarities and histories of that place, both ancient and modern," I determined that if ever the time should arrive when I should become a professor of ecclesiastical history, these should be the opening words in which I would describe the treasures of that magnificent storehouse. Accordingly when, many years after, it so fell out, I could find no better mode of beginning my course at Oxford than by redeeming that early pledge; and when the course came to an end, and I wished to draw a picture of the prospects yet reserved for the future of Christendom, I found again that the best words I could supply were those in which, on leaving the Beautiful house, Christian was shown in the distance the view of the Delectable Mountains, "which, they said, would add to his comfort because they were nearer to the desired haven." What was my own experience in one special branch of knowledge may also be the experience of many others. And for the nation at large, all who appreciate the difficult necessity of refining the atmosphere and cultivating the taste of the un-

* "Church of the Revolution," by the Rev. Dr. Stoughton, p. 175.

educated, and the half educated, may be thankful that in this instance there is a well of English language and of Christian thought, pure and undefiled, at which the least instructed and the best instructed may alike come to quench their mental thirst, and to refresh their intellectual labors. On no other occasion could such a rustic assemblage have been seen taking part in the glorification of a literary work as we have witnessed this day in Bedford. That is a true education of the people—an education which we know not perhaps whether to call denominational or undenominational, but which is truly national, truly Christian, truly divine.

Lastly, there is the practical, homely, energetic insight into the heart of man, and the spiritual needs of human nature, which make his picture of the Pilgrim's heavenward road a living drama, not a dead disquisition, a thing to be imitated, not merely to be read. Look at John Bunyan himself as he stands before you, whether in the description of his own contemporaries, or in the image now so skillfully carved amongst you by the hand of the sculptor. As surely as he walked your streets with his lofty, stalwart form, "tall of stature, strong boned, with sparkling eyes, wearing his hair on his upper lip after the old British fashion, his hair reddish, but in his latter days sprinkled with grey, his nose well cut, his mouth moderate large, his forehead something high, and his habit always plain and modest;" as surely also as he was known amongst his neighbors as "in countenance of a stern and rough temper, but in his conversation mild and affable, not given to loquacity unless occasion required it, observing never to boast of himself, but rather seeming low in his own eyes, and submitting himself to the judgment of others; abhorring lying and swearing, being just in all that lay in his power to his

word, not seeming to revenge injuries, but loving to reconcile differences, and make friendship with all, with a sharp, quick eye, accomplished with an excellent discerning of person, being of good judgment and quick wit;" as surely as he so seemed when he was alive, as surely as he was one of yourselves, a "man of the people," as you heard at St. Peter's Green this morning, a man of the people of England and the people of Bedford—so surely is the pilgrimage which he described the pilgrimage of every one amongst us, so surely are the combinations of the neighbors, the friends, the enemies whom he saw in his dream the same as we see in our actual lives. You and I, as well as he, have met with Mr. By-ends, and Mr. Facing-both-ways, and Mr. Talkative. Some of us, perhaps, may have seen Mr. Nogood and Mr. Liveloose, Mr. Hate-light and Mr. Implacable. All of us have at times been like Mr. Ready-to-halt, Mr. Feeblemind, and Faintheart, and Noheart, and Slowpace, and Shortwind, and Sleepyhead, and "the young woman whose name was Dull." All of us need to be cheered by the help of Greatheart, and Standfast, and Valiant for the Truth, and good old Honest. Some of us have been in Doubting Castle, some in the Slough of Despond; some have experienced the temptations of Vanity Fair; all of us have to climb the Hill Difficulty; all of us need to be instructed by the Interpreter in the House Beautiful; all of us bear the same burden; all of us need the same armor in our fight with Apollyon; all of us have to pass through the wicket gate; all of us have to pass through the dark river; and for all of us (if God so will) there wait the Shining Ones at the gates of the Celestial City, "which, when we see, we wish ourselves amongst them."—*Macmillan's Magazine.*

THREE ANGELS.

THEY say this life is barren, drear, and cold,
 Ever the same sad song was sung of old,
 Ever the same long weary tale is told,
 And to our lips is held the cup of strife;
 And yet—a little love can sweeten life.

They say our hands may grasp but joys destroyed,
 Youth has but dreams, and age an aching void
 Which Dead-Sea fruit long, long ago has cloyed,
 Whose night with wild tempestuous storms is rife;
 And yet—a little hope can brighten life.

They say we fling ourselves in wild despair
 Amidst the broken treasures scattered there
 Where all is wrecked, where all once promised fair,
 And stab ourselves with sorrow's two-edged knife;
 And yet—a little patience strengthens life.

Is it then true, this tale of bitter grief,
 Of mortal anguish finding no relief?
 Lo! midst the winter shines the laurel's leaf:
 Three Angels share the lot of human strife,
 Three Angels glorify the path of life—

Love, Hope, and Patience cheer us on our way;
 Love, Hope, and Patience form our spirits' stay;
 Love, Hope, and Patience watch us day by day,
 And bid the desert bloom with beauty vernal
 Until the earthly fades in the eternal.

Fraser's Magazine.

FAR FROM THE MADDING CROWD.

CHAPTER XXX.

HOT CHEEKS AND TEARFUL EYES

HALF-AN-HOUR later Bathsheba entered her own house. There burnt upon her face when she met the light of the candles the flush and excitement which were little less than chronic with her now. The farewell words of Troy, who had accompanied her to the very door, still lingered in her ears. He had bidden her adieu for two days, which were, so he stated, to be spent at Bath in visiting some friends. He had also kissed her a second time.

It is only fair to Bathsheba to explain here a little fact which did not come to light till a long time afterwards: that Troy's presentation of himself so aptly at the roadside this evening was not by any distinctly preconcerted arrangement. He had hinted—she had forbidden; and it was only on the chance of his still coming that she had dismissed Oak, fearing a meeting between them just then.

She now sank down into a chair, wild and perturbed by all these new and fevering sequences. Then she jumped up with a manner of decision, and fetched her desk from a side table.

In three minutes, without pause or modification, she had written a letter to Boldwood, at his address beyond Casterbridge, saying mildly but firmly that she had well considered the whole subject he had brought before her and kindly given her time to decide upon; that her final decision was that she could not marry him. She had expressed to Oak an intention to wait till Boldwood came home before communicating to him her conclusive reply. But Bathsheba found that she could not wait.

It was impossible to send this letter till the next day; yet to quell her uneasiness by getting it out of her hands, and so, as it were, setting the act in motion at once, she arose to take it to any one of the women who might be in the kitchen.

She paused in the passage. A dialogue was going on in the kitchen, and Bathsheba and Troy were the subject of it.

"If he marry her, she'll gie up farming."

"'Twill be a gallant life, but may bring some trouble between the mirth—so say I."

"Well, I wish I had half such a husband."

Bathsheba had too much sense to mind seriously what her servitors said about her; but too much womanly redundancy of speech to leave alone what was said till it died the natural death of unminded things. She burst in upon them.

"Who are you speaking of?" she asked.

There was a pause before anybody replied. At last Liddy said frankly, "What was passing was a bit of a word about yourself, miss."

"I thought so! Maryann and Liddy and Temperance—now I forbid you to suppose such things. You know I don't care the least for Mr. Troy—not I. Everybody knows how much I hate him.—Yes," repeated the froward young person, "hate him!"

"We know you do, miss," said Liddy, "and so do we all."

"I hate him too," said Maryann.

"Maryann—O you perjured woman! How you can speak that wicked story!" said Bathsheba, excitedly. "You admired him from your heart only this morning in the very world, you did. Yes, Maryann, you know it!"

"Yes, miss, but so did you. He is a wild scamp now, and you are right to hate him."

"He's *not* a wild scamp! How dare you to my face! I have no right to hate him, nor you, nor anybody. But I am a silly woman. What is it to me what he is? You know it is nothing. I don't care for him; I don't mean to defend his good name, not I. Mind this, if any of you say a word against him you'll be dismissed instantly."

She flung down the letter and surged back into the parlor, with a big heart and tearful eyes, Liddy following her.

"O miss!" said mild Liddy, looking pitifully into Bathsheba's face. "I am sorry we mistook you so! I did think you cared for him; but I see you don't now."

"Shut the door, Liddy."

Liddy closed the door, and went on: "People always say such foolery, miss. I'll make answer hencefor'ard, 'Of course a lady like Miss Everdene can't love him; I'll say it out in plain black and white.'"

Bathsheba burst out: "O Liddy, are you such a simpleton! Can't you read riddles? Can't you see! Are you a woman yourself!"

Liddy's clear eyes rounded with wonderment.

"Yes, you must be a blind thing, Liddy!" she said, in reckless abandonment and grief. "Oh, I love him to very distraction and misery and agony. Don't be frightened at me, though perhaps I am enough to frighten any innocent woman. Come closer—closer." She put her arms round Liddy's neck. "I must let it out to somebody; it is wearing me away. Don't you yet know enough of me to see through that miserable denial of mine? O God, what a lie it was? Heaven and my Love forgive me. And don't you know that a woman who loves at all thinks nothing of perjury when it is balanced against her love? There, go out of the room; I want to be quite alone."

Liddy went towards the door.

"Liddy, come here. Solemnly swear to me that he's not a bad man; that it is all lies they say about him!"

"But, miss, how can I say he is not if—"

"You graceless girl. How can you have the cruel heart to repeat what they say? Unfeeling thing that you are. . . . But I'll see if you or anybody else in the village, or town either, dare do such a thing!" She started off, pacing from fire-place to door, and back again.

"No, miss. I don't—I know it is not true," said Liddy, frightened at Bathsheba's unwonted vehemence.

"I suppose you only agree with me like that to please me. But Liddy, he *cannot* be bad, as is said. Do you hear?"

"Yes, miss, yes."

"And you don't believe he is?"

"I don't know what to say, miss," said Liddy, beginning to cry. "If I say No, you don't believe me; and if I say Yes, you rage at me."

"Say you don't believe it—say you don't!"

"I don't believe him to be so bad as they make out."

"He is not bad at all. . . . My poor life and heart, how weak I am!" she moaned in a relaxed, desultory way, heedless of Liddy's presence. "Oh, how I wish I had never seen him! Loving is misery for women always. I shall never forgive my Maker for making me a woman, and dearly am I beginning to pay for the honor of owning a pretty face." She freshened and turned to Liddy sud-

denly. "Mind this, Lydia Smallbury, if you repeat anywhere a single word of what I have said to you inside this closed door, I'll never trust you, or love you, or have you with me a moment longer—not a moment."

"I don't want to repeat anything," said Liddy with womanly dignity of a diminutive order; "but I don't wish to stay with you. And, if you please, I'll go at the end of the harvest, or this week, or to-day . . . I don't see that I deserve to be put upon and stormed at for nothing!" concluded the small woman, bigly.

"No, no, Liddy; you must stay!" said Bathsheba, dropping from haughtiness to entreaty with capricious inconsequence. "You must not notice my being in a taking just now. You are not as a servant—you are a companion to me. Dear, dear—I don't know what I am doing since this miserable ache o' my heart has weighted and worn upon me so. What shall I come to! I suppose I shall die quite young. Yes, I know I shall. I wonder sometimes if I am doomed to die in the Union. I am friendless enough, God knows."

"I won't notice anything, nor will I leave you!" sobbed Liddy, impulsively putting up her lips to Bathsheba's, and kissing her.

Then Bathsheba kissed Liddy, and all was smooth again.

"I don't often cry, do I, Lidd? but you have made tears come into my eyes," she said, a smile shining through the moisture. "Try to think him a good man, won't you, dear Liddy?"

"I will, miss, indeed."

"He is a sort of steady man in a wild way, you know. That's better than to be as some are, wild in a steady way. I am afraid that's how I am. And promise me to keep my secret—do, Liddy! And do not let them know that I have been crying about him, because it will be dreadful for me, and no good to him, poor thing!"

"Death's head himself shan't wring it from me, mistress, if I've a mind to keep anything, and I'll always be your friend," replied Liddy, emphatically, at the same time bringing a few more tears into her own eyes, not from any particular necessity, but from an artistic sense of making herself in keeping with the remainder of the picture, which seems to influence women at

such times. "I think God likes us to be good friends, don't you?"

"Indeed I do."

"And, dear miss, you won't harry me and storm at me, will you? because you seem to swell so tall as a lion then, and it frightens me. Do you know I fancy you would be a match for any man when you are in one o' your takings."

"Never! do you?" said Bathsheba, slightly laughing, though somewhat seriously alarmed by this Amazonian picture of herself. "I hope I am not a bold sort of maid—mannish?" she continued with some anxiety.

"Oh no, not mannish; but so almighty womanish that 'tis getting on that way sometimes. Ah! miss," she said, after having drawn her breath very sadly in and sent it very sadly out, "I wish I had half your failing that way. 'Tis a great protection to a poor maid in these days!"

CHAPTER XXXI.

BLAME: FURY.

THE next evening Bathsheba, with the idea of getting out of the way of Mr. Boldwood in the event of his returning to answer her note in person, proceeded to fulfil an engagement made with Liddy some few hours earlier. Bathsheba's companion, as a gage of their reconciliation, had been granted a week's holiday to visit her sister, who was married to a thriving hurdler and cattle crib-maker living in a delightful labyrinth of hazel copse not far from Yalbury. The arrangement was that Miss Everdene should honor them by coming there for a day or two to inspect some ingenious contrivances which this man of the woods had introduced into his wares.

Leaving her instructions with Gabriel and Maryann that they were to see everything carefully locked up for the night, she went out of the house just at the close of a timely thunder-shower, which had refined the air, and daintily bathed the mere coat of the land, all beneath being dry as ever. Freshness was exhaled in an essence from the varied contours of bank and hollow, as if the earth breathed maiden breath, and the pleased birds were hymning to the scene. Before her among the clouds there was a contrast in the shape of lairs of fierce light which showed themselves in

the neighborhood of a hidden sun, lingering on to the farthest north-west corner of the heavens that this midsummer season allowed.

She had walked nearly three miles of her journey, watching how the day was retreating, and thinking how the time of deeds was quietly melting into the time of thought, to give place in its turn to the time of prayer and sleep, when she beheld advancing over the hill the very man she sought so anxiously to elude. Boldwood was stepping on, not with that quiet tread of reserved strength which was his customary gait, in which he always seemed to be balancing two thoughts. His manner was stunned and sluggish now.

Boldwood had for the first time been awakened to woman's privileges in the practice of tergiversation without regard to another's distraction and possible blight. That Bathsheba was a firm and positive girl, far less inconsequent than her fellows, had been the very lung of his hope; for he had held that these qualities would lead her to adhere to a straight course for consistency's sake, and accept him, though her fancy might not flood him with the iridescent hues of uncritical love. But the argument now came back as sorry gleams from a broken mirror. The discovery was no less a scourge than a surprise.

He came on looking upon the ground, and did not see Bathsheba till they were less than a stone's throw apart. He looked up at the sound of her pit-pat, and his changed appearance sufficiently denoted to her the depth and strength of the feelings paralysed by her letter.

"Oh; is it you, Mr. Boldwood," she faltered, a guilty warmth pulsing in her face.

Those who have the power of reproaching in silence may find it a means more effective than words. There are accents in the eye which are not on the tongue, and more tales come from pale lips than can enter an ear. It is both the grandeur and the pain of the remoter moods that they avoid the pathway of sound. Boldwood's look was unanswerable.

Seeing she turned a little aside, he said, "What, are you afraid of me?"

"Why should you say that?" said Bathsheba.

"I fancied you looked so," said he. "And it is most strange, because of its contrast with my feeling for you."

She regained self-possession, fixed her eyes calmly, and waited.

"You know what that feeling is," continued Boldwood deliberately. "A thing strong as death. No dismissal by a hasty letter affects that."

"I wish you did not feel so strongly about me," she murmured. "It is generous of you, and more than I deserve, but I must not hear it now."

"Hear it? What do you think I have to say, then? I am not to marry you, and that's enough. Your letter was excellently plain. I want you to hear nothing—not I."

Bathsheba was unable to direct her will into any definite groove for freeing herself from this fearfully awkward position. She confusedly said, "Good evening," and was moving on. Boldwood walked up to her heavily and dully.

"Bathsheba—darling—is it final indeed?"

"Indeed it is."

"O Bathsheba—have pity upon me!" Boldwood burst out. "God's sake, yes—I am come to that low, lowest stage—to ask a woman for pity! Still, she is you—she is you."

Bathsheba commanded herself well. But she could hardly get a clear voice for what came instinctively to her lips: "There is little honor to the woman in that speech." It was only whispered, for something unutterably mournful no less than distressing in this spectacle of a man showing himself to be so entirely the vane of a passion enervated the feminine instinct for punctilios.

"I am beyond myself about this, and am mad," he said. "I am no stoic at all to be supplicating here; but I do supplicate to you. I wish you knew what is in me of devotion to you; but it is impossible, that. In bare human mercy to a lonely man don't throw me off now!"

"I don't throw you off—indeed, how can I? I never had you." In her noon-clear sense that she had never loved him she forgot for a moment her thoughtless angle on that day in February.

"But there was a time when you turned to me, before I thought of you. I don't reproach you, for even now I feel that the ignorant and cold darkness that I should have lived in if you had not attracted me by that letter—valentine you call it—would have been worse than my knowledge of you, though it has brought this

misery. But, I say, there was a time when I knew nothing of you, and cared nothing for you, and yet you drew me on. And if you say you gave me no encouragement, I cannot but contradict you."

"What you call encouragement was the childish game of an idle minute. I have bitterly repented of it—ay, bitterly, and in tears. Can you still go on reminding me?"

"I don't accuse you of it—I deplore it. I took for earnest what you insist was jest, and now this that I pray to be jest you say is awful wretched earnest. Our moods meet at wrong places. I wish your feeling was more like mine, or my feeling more like yours! O could I but have foreseen the torture that trifling trick was going to lead me into, how I should have cursed you; but only having been able to see it since, I cannot do that, for I love you too well! But it is weak, idle drivelling to go on like this. . . . Bathsheba, you are the first woman of any shade or nature that I have ever looked at to love, and it is the having been so near claiming you for my own that makes this denial so hard to bear. How nearly you promised me! But I don't speak now to move your heart, and make you grieve because of my pain; it is no use, that. I must bear it; my pain would get no less by paining you."

"But I do pity you—deeply oh—so deeply!" she earnestly said.

"Do no such thing—do no such thing. Your dear love, Bathsheba, is such a vast thing beside your pity that the loss of your pity as well as your love is no great addition to my sorrow, nor does the gain of your pity make it sensibly less. Oh sweet—how dearly you spoke to me behind the spear-bed at the washing-pool, and in the barn at the shearing, and that dearest last time in the evening at your home! Where are your pleasant words all gone—your earnest hope to be able to love me? Where is your firm conviction that you would get to care for me very much? Really forgotten?—really?"

She checked emotion, looked him quietly and clearly in the face, and said in her low firm voice, "Mr. Boldwood, I promised you nothing. Would you have had me a woman of clay when you paid me that furthest, highest compliment a man can pay a woman—telling her he loves

her? I was bound to show some feeling, if I would not be a graceless shrew. Yet each of those pleasures was just for the day—the day just for the pleasure. How was I to know that what is a pastime to all other men was death to you? Have reason, do, and think more kindly of me!"

"Well, never mind arguing—never mind. One thing is sure: you were all but mine, and now you are not nearly mine. Everything is changed, and that by you alone, remember. You were nothing to me once, and I was contented; you are now nothing to me again, and how different the second nothing is from the first! Would to God you had never taken me up, since it was only to throw me down!"

Bathsheba, in spite of her mettle, began to feel unmistakable signs that she was inherently the weaker vessel. She strove miserably against this femininity which would insist upon supplying unbidden emotions in stronger and stronger current. She had tried to elude agitation by fixing her mind on the trees, sky, any trivial object before her eyes, whilst his reproaches fell, but ingenuity could not save her now.

"I did not take you up—surely I did not!" she answered as heroically as she could. "But don't be in this mood with me. I can endure being told I am in the wrong, if you will only tell it me gently! Oh sir, will you not kindly forgive me, and look at it cheerfully?"

"Cheerfully! Can a man fooled to utter heartburning find a reason for being merry? If I have lost, how can I be as if I had won? Heavens, you must be heartless quite! Had I known what a fearfully bitter sweet this was to be, how I would have avoided you, and never seen you, and been deaf to you. I tell you all this, but what do you care! You don't care."

She returned silent and weak denials to his charges, and swayed her head desperately, as if to thrust away the words as they came showering about her ears from the lips of the trembling man in the climax of life, with his bronzed Roman face and fine frame.

"Dearest, dearest, I am wavering even now between the two opposites of recklessly renouncing you, and laboring humbly for you again. Forget that you have said No, and let it be as it were. Say, Bathsheba, that you only wrote that refusal to me in fun—come, say it to me!"

"It would be untrue, and painful to both of us. You overrate my capacity for love. I don't possess half the warmth of nature you believe me to have. An unprotected childhood in a cold world has beaten gentleness out of me."

He immediately said with more resentment: "That may be true, somewhat; but ah, Miss Everdene, it won't do as a reason! You are not the cold woman you would have me believe. No, no. It isn't because you have no feeling in you that you don't love me. You naturally would have me think so—you would hide from me that you have a burning heart like mine. You have love enough, but it is turned into a new channel. I know where."

The swift music of her heart became hubbub now, and she throbbed to extremity. He was coming to Troy. He did then know what had transpired! And the name fell from his lips the next moment.

"Why did Troy not leave my treasure alone?" he asked, fiercely. "When I had no thought of injuring him why did he force himself upon your notice! Before he worried you your inclination was to have me; when next I should have come to you your answer would have been Yes. Can you deny it—I ask, can you deny it?"

She delayed the reply, but was too honest to withhold it. "I cannot," she whispered.

"I know you cannot. But he stole in in my absence and robbed me. Why didn't he win you away before, when nobody would have been grieved?—when nobody would have been set tale-bearing. Now the people sneer at me—the very hills and sky seem to laugh at me till I blush shamefully for my folly. I have lost my respect, my good name, my standing—lost it, never to get it again. Go and marry your man—go on!"

"Oh sir—Mr. Boldwood!"

"You may as well. I have no further claim upon you. As for me, I had better go somewhere alone, and hide,—and pray. I loved a woman once. I am now ashamed. When I am dead they'll say, miserable love-sick man that he was. Heaven—heaven—if I had got jilted secretly, and the dishonor not known, and my position kept! But no matter, it is gone, and the woman not gained. Shame upon him—shame!"

His unreasonable anger terrified her, and

she glided from him, without obviously moving, as she said, "I am only a girl—do not speak to me so!"

"All the time you knew—how very well you knew—that your new freak was my misery. Dazzled by brass and scarlet—oh Bathsheba—this is woman's folly indeed!"

She fired up at once. "You are taking too much upon yourself!" she said vehemently. "Everybody is upon me—everybody. It is unmanly to attack a woman so! I have nobody in the world to fight my battles for me, but no mercy is shown. Yet if a thousand of you sneer and say things against me, I *will not* be put down!"

"You'll chatter with him doubtless about me. Say to him, 'Boldwood would have died for me.' Yes, and you have given way to him knowing him to be not the man for you. He has kissed you—claimed you as his. Do you hear, he has kissed you. Deny it!"

The most tragic woman is cowed by a tragic man, and although Boldwood was, in vehemence and glow, nearly her own self rendered into another sex, Bathsheba's cheek quivered. She gasped, "Leave me sir—leave me! I am nothing to you. Let me go on!"

"Deny that he has kissed you."

"I shall not."

"Ha—then he has!" came hoarsely from the farmer.

"He has," she said, slowly, and in spite of her fear, defiantly. "I am not ashamed to speak the truth."

"Then curse him; and curse him!" said Boldwood, breaking into a whispered fury. "Whilst I would have given worlds to touch your hand you have let a rake come in without right or ceremony and—kiss you! Heaven's mercy—kiss you! . . . Ah, a time of his life shall come when he will have to repent—and think wretchedly of the pain he has caused another man; and then may he ache, and wish, and curse, and yearn—as I do now!"

"Don't, don't, oh don't pray down evil upon him!" she implored in a miserable cry. "Anything but that—anything. Oh be kind to him, sir, for I love him dearly!"

Boldwood's ideas had reached that point of fusion at which outline and consistency entirely disappear. The impending night appeared to concentrate in his eye. He did not hear her at all now.

"I'll punish him—by my soul that will I! I'll meet him, soldier or no, and I'll horsewhip the untimely stripling for this reckless theft of my one delight. If he were a hundred men I'd horsewhip him. . . ." He dropped his voice suddenly and unnaturally. "Bathsheba, sweet lost coquette, pardon me. I've been blaming you, threatening you, behaving like a churl to you, when he's the greatest sinner. He stole your dear heart away with his unfathomable lies! . . . It is a fortunate thing for him that he's gone back to his regiment—that he's in Melchester, and not here! I hope he may not return here just yet. I pray God he may not come into my sight, for I may be tempted beyond myself. Oh Bathsheba, keep him away—yes, keep him away from me!"

For a moment Boldwood stood so inertly after this that his soul seemed to have been entirely exhaled with the breath of his passionate words. He turned his face away, and withdrew, and his form was soon covered over by the twilight as his footsteps mixed in with the low hiss of the leafy trees.

Bathsheba, who had been standing motionless as a model all this latter time, flung her hands to her face, and wildly attempted to ponder on the exhibition which had just passed away. Such astounding wells of fevered feeling in a still man like Mr. Boldwood were incomprehensible, dreadful. Instead of being a man trained to repression, he was—what she had seen him.

The force of the farmer's threats lay in their relation to a circumstance known at present only to herself; her lover was coming back to Weatherbury the very next day. Troy had not returned to Melchester Barracks as Boldwood and others supposed, but had merely gone for a day or two to visit some acquaintance in Bath, and had yet a week or more remaining to his furlough.

She felt wretchedly certain that if he revisited her just at this nick of time, and came into contact with Boldwood, a fierce quarrel would be the consequence. She panted with solicitude when she thought of possible injury to Troy. The least spark would kindle the farmer's swift feelings of rage and jealousy; he would lose his self-mastery as he had this evening; Troy's blitheness might become aggressive; it might take the direction of derision, and Boldwood's anger might then take the direction of revenge.

"With almost a morbid dread of being thought a gushing girl, this guideless woman too well concealed from the world under a manner of carelessness the warm depths of her strong emotions. But now there was no reserve. In her distraction, instead of advancing further, she walked up and down, beating the air with her fingers, pressing her brow, and sobbing brokenly to herself. Then she sat down on a heap of stones by the wayside to think. There she remained long. The dark rotundity of the earth approached the foreshores and promontories of coppery cloud which bounded a green and pellucid expanse in the western sky, amaranthine glosses came over them then, and the unresting world wheeled her round to a contrasting prospect eastward, in the shape of indecisive and palpitating stars. She gazed upon their silent throes amid the shades of space, but realised none at all. Her troubled spirit was far away with Troy.

CHAPTER XXXII.

NIGHT: HORSES TRAMPING.

THE village of Weatherbury was quiet as the graveyard in its midst, and the living were lying well-nigh as still as the dead. The church clock struck eleven. The air was so empty of other sounds that the whirr of the clockwork immediately before the strokes was distinct, and so was also the click of the same at their close. The notes flew forth with the usual blind obtuseness of inanimate things—flapping and rebounding among walls, undulating against the scattered clouds, spreading through their interstices into unexplored miles of space.

Bathsheba's crannied and mouldy halls were to-night occupied only by Maryann, Liddy being, as was stated, with her sister, whom Bathsheba had set out to visit. A few minutes after eleven had struck, Maryann turned in her bed with a sense of being disturbed. She was totally unconscious of the nature of the interruption to her sleep. It led to a dream, and the dream to an awakening, with an uneasy sensation that something had happened. She left her bed and looked out of the window. The paddock abutted on this end of the building, and in the paddock she could just discern by the uncertain gray a moving figure approaching the horse that was feeding there. The figure seized the horse by

the forelock, and led it to the corner of the field. Here she could see some object which circumstances proved to be a vehicle, for after a few minutes spent apparently in harnessing, she heard the trot of the horse down the road, mingled with the sound of light wheels.

Two varieties only of humanity could have entered the paddock with the ghost-like glide of that mysterious figure. They were a woman and a gipsy man. A woman was out of the question in such an occupation at this hour, and the comer could be no less than a thief, who might probably have known the weakness of the household on this particular night, and have chosen it on that account for his daring attempt. Moreover, to raise suspicion to conviction itself, there were gipsies in Weatherbury Bottom.

Maryann, who had been afraid to shout in the robber's presence, having seen him depart, had no fear. She hastily slipped on her clothes, stumped down the disjointed staircase with its hundred creaks, ran to Coggan's, the nearest house, and raised an alarm. Coggan called Gabriel, who now again lodged in his house as at first, and together they went to the paddock. Beyond all doubt the horse was gone.

"Listen!" said Gabriel.

They listened. Distinct upon the stagnant air came the sounds of a trotting horse passing over Weatherbury Hill—just beyond the gipsies' encampment in Weatherbury Bottom.

"That's our Dainty—I'll swear to her step," said Jan.

"Mighty me! Won't mis'ess storm and call us stupid when she comes back!" moaned Maryann. "How I wish it had happened when she was at home, and none of us had been answerable!"

"We must ride after," said Gabriel, decisively. "I'll be responsible to Miss Eyerdene for what we do. Yes, we'll follow."

"Faith, I don't see how," said Coggan. "All our horses are too heavy for that trick except little Poppet, and what's he between two of us?—If we only had that pair over the hedge we might do something."

"Which pair?"

"Mr. Boldwood's Tidy and Moll."

"Then wait here till I come hither again," said Gabriel. He ran down the hill towards Farmer Boldwood's.

"Farmer Boldwood is not at home," said Maryann.

"All the better," said Coggan. "I know what he's gone for."

Less than five minutes brought up Oak again, running at the same pace, with two halters dangling from his hand.

"Where did you find 'em?" said Coggan, turning round and leaping upon the hedge without waiting for an answer.

"Under the eaves. I knew where they were kept," said Gabriel, following him. "Coggan, you can ride bare-backed? there's no time to look for saddles."

"Like a hero!" said Jan.

"Maryann, you go to bed," Gabriel shouted to her from the top of the hedge.

Springing down into Boldwood's pastures, each pocketed his halter to hide it from the horses, who seeing the men empty-handed, docilely allowed themselves to be seized by the mane, when the halters were dexterously slipped on. Having neither bit nor bridle, Oak and Coggan extemporised the former by passing the rope in each case through the animal's mouth and looping it on the other side. Oak vaulted astride, and Coggan clambered up by aid of the bank, when they ascended to the gate and galloped off in the direction taken by Bathsheba's horse and the robber. Whose vehicle the horse had been harnessed to was a matter of some uncertainty.

Weatherbury Bottom was reached in three or four minutes. They scanned the shady green patch by the roadside. The gipsies were gone.

"The villains!" said Gabriel. "Which way have they gone, I wonder?"

"Straight on, as sure as God made little apples," said Jan.

"Very well; we are better mounted, and must overtake 'em," said Oak. "Now, on at full speed!"

No sound of the rider in their van could now be discovered. The road-metal grew softer and more clayey as Weatherbury was left behind, and the late rain had wetted its surface to a somewhat plastic, but not muddy state. They came to cross-roads. Coggan suddenly pulled up Moll and slipped off.

"What's the matter?" said Gabriel.

"We must try to track 'em, since we can't hear 'em," said Jan, fumbling in his pockets. He struck a light, and held the match to the ground. The rain had been heavier here, and all foot and horse tracks made previous to the storm had been abraded and blurred by the drops, and

they were now so many little scoops of water, which reflected the flame of the match like eyes. One set of tracks was fresh and had no water in them; one pair of ruts was also empty, and not small canals, like the others. The footprints forming this recent impression were full of information as to pace; they were in equidistant pairs, three or four feet apart, the right and left foot of each pair being exactly opposite one another.

"Straight on!" Jan exclaimed. "Tracks like that mean a stiff gallop. No wonder we don't hear him. And the horse is harnessed—look at the ruts. Ay, that's our mare sure enough!"

"How do you know?"

"Old Jimmy Harris only shod her last week, and I'd swear to his make among ten thousand."

"The rest of the gipsies must have gone on earlier, or some other way," said Oak. "You saw there were no other tracks?"

"Trew." They rode along silently for a long weary time. Coggan's watch struck one. He lighted another match, and examined the ground again.

"'Tis a canter now," he said, throwing away the light. "A twisty rickety pace for a gig. The fact is, they overdrove her at starting; we shall catch them yet."

Again they hastened on. Coggan's watch struck two. When they looked again the hoof-marks were so spaced as to form a sort of zigzag if united, like the lamps along a street.

"That's a trot, I know," said Gabriel.

"Only a trot now," said Coggan cheerfully. "We shall overtake him in time."

They pushed rapidly on for yet two or three miles. "Ah! a moment," said Jan. "Let's see how she was driven up this hill. 'Twill help us." A light was promptly struck upon his gaiters as before, and the examination made.

"Hurrah!" said Coggan. "She walked up here—and well she might. We shall get them in two miles, for a crown."

They rode three, and listened. No sound was to be heard save a mill-pond trickling hoarsely through a hatch, and suggesting gloomy possibilities of drowning by jumping in. Gabriel dismounted when they came to a turning. The tracks were absolutely the only guide as to the direction that they now had, and great caution was necessary to avoid confusing

them with some others which had made their appearance lately.

"What does this mean?—though I guess," said Gabriel, looking up at Coggan as he moved the match over the ground about the turning. Coggan, who, no less than the panting horses, had latterly shown signs of weariness, again scrutinized the mystic characters. This time only three were of the regular horse-shoe shape. Every fourth was a dot.

He screwed up his face, and emitted a long "whew-w!"

"Lame," said Oak.

"Yes. Dainty is lamed; the near-foot-afore," said Coggan slowly, staring still at the footprints.

"We'll push on," said Gabriel, remounting his humid steed.

Although the road along its greater part had been as good as any turnpike-road in the country, it was nominally only a byway. The last turning had brought them into the high road leading to Bath. Coggan recollected himself.

"We shall have him now!" he exclaimed.

"Where?"

"Pettiton Turnpike. The keeper of that gate is the sleepest man between here and London—Dan Randall, that's his name—known en for years, when he was at Casterbridge gate. Between the lameness and the gate 'tis a done job."

They now advanced with extreme caution. Nothing was said until, against a shady background of foliage, five white bars were visible, crossing their route a little way ahead.

"Hush—we are almost close!" said Gabriel.

"Amble on upon the grass," said Coggan.

The white bars were blotted out in the midst by a dark shape in front of them. The silence of this lonely time was pierced by an exclamation from that quarter.

"Hoy-a-hoy! Gate!"

It appeared that there had been a previous call which they had not noticed, for on their close approach the door of the turnpike-house opened, and the keeper came out half-dressed, with a candle in his hand. The rays illumined the whole group.

"Keep the gate closed!" shouted Gabriel. "He has stolen the horse!"

"Who?" said the turnpike man.

Gabriel looked at the driver of the gig, and saw a woman—Bathsheba, his mistress.

On hearing his voice she had turned her face away from the light. Coggan had, however, caught sight of her in the meanwhile.

"Why, 'tis mistress—I'll take my oath!" he said, amazed.

Bathsheba it certainly was, and she had by this time done the trick she could do so well in crises not of love, namely, mask a surprise by coolness of manner.

"Well, Gabriel," she inquired quietly, "where are you going?"

"We thought——" began Gabriel.

"I am driving to Bath," she said, taking for her own use the assurance that Gabriel lacked. "An important matter made it necessary for me to give up my visit to Liddy, and go off at once. What, then, were you following me?"

"We thought the horse was stole."

"Well—what a thing! How very foolish of you not to know that I had taken the trap and horse. I could neither wake Maryann nor get into the house, though I hammered for ten minutes against her window-sill. Fortunately, I could get the key of the coach-house, so I troubled no one further. Didn't you think it might be me?"

"Why should we, miss?"

"Perhaps not. Why, those are never Farmer Boldwood's horses! Goodness mercy! what have you been doing—bringing trouble upon me in this way? What! mustn't a lady move an inch from her door without being dogged like a thief?"

"But how were we to know, if you left no account of your doings," expostulated Coggan, "and ladies don't drive at these hours as a jeneral rule of society."

"I did leave an account—and you would have seen it in the morning. I wrote in chalk on the coach-house doors that I had come back for the horse and gig, and driven off; that I could arouse nobody, and should return soon."

"But you'll consider, ma'am, that we couldn't see that till it got daylight."

"True," she said, and though vexed at first she had too much sense to blame them long or seriously for a devotion to her that was as valuable as it was rare. She added with a very pretty grace, "Well,

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I really thank you heartily for taking all this trouble; but I wish you had borrowed anybody's horses but Mr. Boldwood's."

"Dainty is lame, miss," said Coggan. "Can ye go on?"

"It was only a stone in her shoe. I dismounted and pulled it out a hundred yards back. I can manage very well, thank you. I shall be in Bath by daylight. Will you now return, please?"

She turned her head—the gatemans' candle shimmering upon her quick, clear eyes as she did so—passed through the gate, and was soon wrapped in the embowering shades of mysterious summer boughs. Coggan and Gabriel put about their horses, and, fanned by the velvety air of this July night, retraced the road by which they had come.

"A strange vagary, this of hers, isn't it, Oak?" said Coggan, curiously.

"Yes," said Gabriel, shortly. "Coggan, suppose we keep this night's work as quiet as we can?"

"I am of one and the same mind."

"Very well. We shall be home by three o'clock or so, and can creep into the parish like lambs."

Bathsheba's perturbed meditations by the roadside had ultimately evolved a conclusion that there were only two remedies for the present desperate state of affairs. The first was merely to keep Troy away from Weatherbury till Boldwood's indignation had cooled; the second to listen to Oak's entreaties, and Boldwood's denunciations, and give up Troy altogether.

Alas! Could she give up this new love—induce him to renounce her by saying she did not like him—could no more speak to him, and beg him, for her good, to end his furlough in Bath, and see her and Weatherbury no more?

It was a picture full of misery, but for a while she contemplated it firmly, allowing herself, nevertheless, as girls will, to dwell upon the happy life she would have enjoyed had Troy been Boldwood, and the path of love the path of duty—inflicting upon herself gratuitous tortures by imagining him the lover of another woman after forgetting her, for she had penetrated Troy's nature so far as to estimate his tendencies pretty accurately, but unfortunately loved him no less in thinking that he might soon cease to love her—indeed considerably more.

She jumped to her feet. She would see him at once. Yes, she would implore him by word of mouth to assist her in this dilemma. A letter to keep him away could not reach him in time, even if he should be disposed to listen to it.

Was Bathsheba altogether blind to the obvious fact that the support of a lover's arms is not of a kind best calculated to assist a resolve to renounce him? Or was she sophistically sensible, with a thrill of pleasure, that by adopting this course for getting rid of him she was ensuring a meeting with him, at any rate, once more?

It was now dark, and the hour must have been nearly ten. The only way to accomplish her purpose was to give up the idea of visiting Liddy at Yalbury, return to Weatherbury farm, put the horse into the gig, and drive at once to Bath. The scheme seemed at first impossible: the journey was a fearfully heavy one, even for a strong horse; it was most venturesome for a woman, at night, and alone.

But could she go on to Liddy's and leave things to take their course? No, no, anything but that. Bathsheba was full of a stimulating turbulence, beside which caution vainly prayed for a hearing. She turned back towards the village.

Her walk was slow, for she wished not to enter Weatherbury till the cottagers were in bed, and, particularly, till Boldwood was secure. Her plan was now to drive to Bath during the night, see Sergeant Troy in the morning before he set out to come to her, bid him farewell, and dismiss him: then to rest the horse thoroughly (herself to weep the while, she thought), starting early the next morning on her return journey. By this arrangement she could trot Dainty gently all the day, reach Liddy at Yalbury in the evening, and come home to Weatherbury with her whenever they chose—so nobody would know she had been to Bath at all.

This idea she proceeded to carry out, with what success we have already seen.

CHAPTER XXXIII.

IN THE SUN: A HARBINGER.

A WEEK passed, and there were no tidings of Bathsheba; nor was there any explanation of her Gilpin's rig.

Then a note came for Maryann, stating that the business which had called her

mistress to Bath still detained her there; but that she hoped to return in the course of another week.

Another week passed. The oat-harvest began, and all the men were afield under a monochromatic Lammas sky, amid the trembling air and short shadows of noon. Indoors nothing was to be heard save the droning of blue-bottle flies; out-of-doors the whetting of scythes and the hiss of tressy oat-ears rubbing together as their perpendicular stalks of amber-yellow fell heavily to each swath. Every drop of moisture not in the men's bottles and flagons in the form of cider was raining as perspiration from their foreheads and cheeks. Drought was everywhere else.

They were about to withdraw for a while into the charitable shade of a tree in the fence, when Coggan saw a figure in a blue coat and brass buttons running to them across the field.

"I wonder who that is?" he said.

"I hope nothing is wrong about mistress," said Maryann, who with some other women were tying the bundles (oats being always sheafed on this farm), "but an unlucky token came to me indoors this morning. I went to unlock the door and dropped the key, and it fell upon the stone floor and broke into two pieces. Breaking a key is a dreadful bodement. I wish mis'ess was home."

"'Tis Cain Ball," said Gabriel, pausing from whetting his reaphook.

Oak was not bound by his agreement to assist in the corn-field; but the harvest-month is an anxious time for a farmer, and the corn was Bathsheba's, so he lent a hand.

"He's dressed up in his best clothes," said Matthew Moon. "He hev been away from home a few days, since he's had that felon upon his finger; for a' said, since I can't work I'll have a hollerday."

"A good time for one—an excellent time," said Joseph Poorgress, straightening his back; for he, like some of the others, had a way of resting a while from his labor on such hot days for reasons preternaturally small; of which Cain Ball's advent on a week-day in his Sunday clothes was one of the first magnitude. "'Twas a bad leg allowed me to read the *Pilgrim's Progress*, and Mark Clark learnt All-Fours in a whitlow."

"Ay, and my father put his arm out of joint to have time to go courting," said Jan Coggan in an eclipsing tone, wiping

his face with his shirt-sleeve and thrusting back his hat upon the nape of his neck.

By this time Cainy was nearing the group of harvesters, and was perceived to be carrying a large slice of bread and ham in one hand, from which he took mouthfuls as he ran, the other hand being wrapped in a bandage. When he came close, his mouth assumed the bell shape, and he began to cough violently.

"Now, Cainy!" said Gabriel, sternly. "How many more times must I tell you to keep from running so fast when you are eating? You'll choke yourself some day, that's what you'll do, Cain Ball."

"Hok-hok-hok!" replied Cain. "A crumb of my victuals went the wrong way—hok-hok! That's what 'tis, Mister Oak! And I've been visiting to Bath because I had a felon on my thumb; yes, and I've seen—ahok-hok!"

Directly Cain mentioned Bath, they all threw down their hooks and forks and drew round him. Unfortunately the erratic crumb did not improve his narrative powers, and a supplementary hindrance was that of a sneeze, jerking from his pocket his rather large watch, which dangled in front of the young man pendulum-wise.

"Yes," he continued, directing his thoughts to Bath and letting his eyes follow, "I've seed the world at last—yes—and I've seed our mis'ess—ahok-hok-hok!"

"Bother the boy!" said Gabriel. "Something is always going the wrong way down your throat, so that you can't tell what's necessary to be told."

"Ahok! there! Please, Mister Oak, a gnat have just flew into my stomach and brought the cough on again!"

"Yes, that's just it. Your mouth is always open, you young rascal."

"'Tis terrible bad to have a gnat fly down yer throat, pore boy!" said Matthew Moon.

"Well, at Bath you saw—" prompted Gabriel.

"I saw our mistress," continued the junior shepherd, "and a soldier, walking along. And bymeby they got closer and closer, and then they went arm-in-crook, like courting complete—hok-hok! like courting complete—hok!—courting complete—" Losing the thread of his narrative at this point simultaneously with his loss of breath, their informant looked up and down the field apparently for some

clue to it. "Well, I see our mis'ess and a soldier—a-ha-a-wk!"

"D—— the boy!" said Gabriel.

"'Tis only my manner, Mister Oak, if ye'll excuse it," said Cain Ball, looking reproachfully at Oak, with eyes drenched in their own dew.

"Here's some cider for him—that'll cure his throat," said Jan Coggan, lifting a flagon of cider, pulling out the cork, and applying the hole to Cainy's mouth; Joseph Poorgrass in the meantime beginning to think apprehensively of the serious consequences that would follow Cainy Ball's strangulation in his cough, and the history of his Bath adventures dying with him.

"For my poor self, I always say 'please God' afore I do anything," said Joseph, in an unboastful voice; "and so should you, Cain Ball. 'Tis a great safeguard, and might perhaps save you from being choked to death some day."

Mr. Coggan poured the liquor with unstinted liberality at the suffering Cain's circular mouth; half of it running down the side of the flagon, and half of what reached his mouth running down outside his throat, and half of what ran in going the wrong way, and being coughed and sneezed around the persons of the gathered reapers in the form of a rarefied cider fog, which for a moment hung in the sunny air like a small exhalation.

"There's a great clumsy sneeze! Why can't ye have better manners, you young dog!" said Coggan, withdrawing the flagon.

"The cider went up my nose!" cried Cainy, as soon as he could speak; "and now 'tis gone down my neck, and into my poor dumb felon, and over my shiny buttons and all my best cloze!"

"The pore lad's cough is terrible unfortunate," said Matthew Moon. "And a great history on hand, too. Bump his back, shepherd."

"'Tis my nater," mourned Cain. "Mother says I always was so excitable when my feelings were worked up to a point."

"True, true," said Joseph Poorgrass. "The Balls were always a very excitable family. I knowed the boy's grandfather—a truly nervous and modest man, even to genteel refinement. 'Twas blush, blush with him, almost as much as 'tis with me—not but that 'tis a fault in me."

"Not at all, Master Poorgrass," said

Coggan. "Tis a very noble quality in ye."

"Heh-heh! well, I wish to noise nothing abroad—nothing at all," murmured Poorglass, diffidently. "But we are born to things—that's true. Yet I would rather my trifle were hid; though, perhaps, a high nature is a little high, and at my birth all things were possible to my Maker and he may have begrudged no gifts. . . . But under your bushel, Joseph! under your bushel with you! A strange desire, neighbors, this desire to hide, and no praise due. Yet there is a Sermon on the Mount with a calendar of the blessed at the head, and certain-meek men may be named therein."

"Cainy's grandfather was a very clever man," said Matthew Moon. "Invented a apple-tree out of his own head, which is called by his name to this day—the Early Ball. You know 'em, Jan? A Quarrington grafted on a Tom Putt, and a Rather-ripe upon top o' that again. 'Tis trew a' used to bide about in a public-house in a way he had no business to by rights, but there—'a were a clever man in the sense of the term."

"Now, then," said Gabriel impatiently, "what did you see, Cain?"

"I seed our mis'ess go into a sort of a park place, where there's seats, and shrubs and flowers, arm-in-crook with a soldier," continued Cainy firmly, and with a dim sense that his words were very effective as regarded Gabriel's emotions. "And I think the soldier was Sergeant Troy. And they sat there together for more than half-an-hour, talking moving things, and she once was crying almost to death. And when they came out her eyes were shining and she was as white as a lily; and they looked into one another's faces, as desperately friendly as a man and woman can be."

Gabriel's features seemed to get thinner. "Well, what did you see besides?"

"Oh, all sorts."

"White as a lily? You are sure 'twas she."

"Yes."

"Well, what besides?"

"Great glass windows to the shops, and great clouds in the sky, full of rain, and old wooden trees in the country round."

"You stun-poll! What will ye say next!" said Coggan.

"Let en alone," interposed Joseph

Poorglass. "The boy's maning is that the sky and the earth in the kingdom of Bath is not altogether different from ours here. 'Tis for our good to gain knowledge of strange cities, and as such the boy's words should be suffered, so to speak it."

"And the people of Bath," continued Cain, "never need to light their fires except as a luxury, for the water springs up out of the earth ready boiled for use."

"'Tis true as the light," testified Matthew Moon. "I've heard other navigators say the same thing."

"They drink nothing else there," said Cain, "and seem to enjoy it, to see how they swaller it down."

"Well, it seems a barbarous practice enough to us, but I daresay the natives think nothing of it," said Matthew.

"And don't victuals spring up as well as drink?" asked Coggan, twirling his eye.

"No—I own to a blot there in Bath—a true blot. God didn't provide 'em with victuals as well as drink, and 'twas a drawback I couldn't get over at all."

"Well, 'tis a curious place, to say the least," observed Moon; "and it must be a curious people that live therein."

"Miss Everdene and the soldier were walking about together, you say?" said Gabriel, returning to the group.

"Ay, and she wore a beautiful gold-color silk gown, trimmed with black lace, that would have stood alone without legs inside if required. 'Twas a very winsome sight; and her hair was brushed splendid. And when the sun shone upon the bright gown and his red coat—my! how handsome they looked. You could see 'em all the length of the street."

"And what then?" murmured Gabriel.

"And then I went into Griffin's to have my boots hobbled, and then I went to Riggs's batty-cake shop, and asked 'em for a penneth of the cheapest and nicest stales, that were all but blue-mouldy but not quite. And whilst I was chawing 'em down I walked on and seed a clock with a face as big as a baking-trendle——"

"But that's nothing to do with mistress!"

"I'm coming to that, if you'll leave me alone, Mister Oak!" remonstrated Cainy. "If you excites me, perhaps you'll bring on my cough, and then I shan't be able to tell you nothing."

"Yes—let him tell it his own way," said Coggan.

Gabriel settled into a despairing attitude of patience, and Cainy went on:—

"And there were great large houses, and more people all the week long than at Weatherbury club-walking on White Tuesdays. And I went to grand churches and chapels. And how the parson would pray! Yes, he would kneel down, and put up his hands together, and make the holy gold rings on his fingers gleam and twinkle in yer eyes, that he'd earned by praying so excellent well!—Ah yes, I wish I lived there."

"Our poor Parson Thirdly can't get no money to buy such rings," said Matthew Moon thoughtfully. "And as good a man as ever walked. I don't believe poor Thirdly have a single one, even of humblest tin or copper. Such a great ornament as they'd be to him on a dull afternoon, when he's up in the pulpit lighted by the wax candles! But 'tis impossible, poor man. Ah, to think how unequal things be."

"Perhaps he's made of different stuff than to wear 'em," said Gabriel grimly. "Well, that's enough of this. Go on, Cainy—quick."

"Oh—and the new style of parsons wear moustaches and long beards," continued the illustrious traveller, "and look like Moses and Aaron complete, and make we fokes in the congregation feel all over like the children of Israel."

"A very right feeling—very," said Joseph Poorgrass.

"And there's two religions going on in the nation now—High Church and High Chapel. And, thinks I, I'll play fair; so I went to High Church in the morning, and High Chapel in the afternoon."

"A right and proper boy," said Joseph Poorgrass.

"Well, at High Church they pray singing, and believe in all the colors of the rainbow; and at High Chapel they pray preaching, and believe in drab and white-wash only. And then—I didn't see no more of Miss Everdene at all."

"Why didn't you say so before, then?" exclaimed Oak, with much disappointment.

"Ah," said Matthew Moon, "she'll wish her cake dough if so be she's over intimate with that man."

"She's not over intimate with him," said Gabriel, indignantly.

"She would know better," said Coggan. "Our mis'ess has too much sense under

those knots of black hair to do such a mad thing."

"You see, he's not a coarse ignorant man, for he was well brought up," said Matthew, dubiously. "'Twas only wildness that made him a soldier, and maids rather like your man of sin."

"Now, Cain Ball, said Gabriel restlessly, "can you swear in the most awful form that the woman you saw was Miss Everdene?"

"Cain Ball, you are no longer a babe and suckling," said Joseph in the sepulchral tone the circumstances demanded, "and you know what taking an oath is. 'Tis a horrible testament, mind ye, which you say and seal with your bloodstone, and the prophet Matthew tells us that on whomsoever it shall fall it will grind him to powder. Now, before all the work-folk here assembled can you swear to your words as the shepherd asks ye?"

"Please, no, Mister Oak!" said Cainy, looking from one to the other with great uneasiness at the spiritual magnitude of the position. "I don't mind saying 'tis true, but I don't like to say 'tis d—true, if that's what you mane."

"Cain, Cain, how can you!" said Joseph, sternly. "You are asked to swear in a holy manner, and you swear like wicked Shimei, the son of Gera, who cursed as he came. Young man, fie!"

"No, I don't! 'Tis you want to squander a pore boy's soul, Joseph Poorgrass—that's what 'tis!" said Cain, beginning to cry. "All I mane is that in common truth 'twas Miss Everdene and Sergeant Troy, but in the horrible so-help-me truth that ye want to make of it perhaps 'twas somebody else."

"There's no getting at the rights of it," said Gabriel, turning to his work.

"Cain Ball, you'll come to a bit of bread," groaned Joseph Poorgrass.

Then the reapers' hooks were flourished again, and the old sounds went on. Gabriel, without making any pretence of being lively, did nothing to show that he was particularly dull. However, Coggan knew pretty nearly how the land lay, and when they were in a nook together he said—

"Don't take on about her, Gabriel. What difference does it make whose sweetheart she is, since she can't be yours?"

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(To be continued.)

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(To be continued.)

FIJI.

BY A RECENT RESIDENT.

THE possibility of Fiji becoming a British Colony naturally directs attention to this interesting group of islands in the South Pacific Ocean, which are destined, under any circumstances, to be of considerable importance. Lying to the north-east of Australasia, 1,700 miles distant from Sydney, and 1,100 miles from Auckland, they have been for some time of great interest to the colonists of Australia and New Zealand. Fiji comprises a group of islands upwards of two hundred in number, and of which more than sixty are inhabited. The more important, however, only number about a dozen. They are named Viti Levu, Vanua Levu, Taviuni, Kanda-vu, Koro, Loma Loma, Lakemba, Mango, Rambai, Ngau, Batiki, and Ovalau. On the eastern shores of the last mentioned, the town of Levuka has sprung into existence, which is the capital of the group. Occupying the central portion of Western Polynesia, midway between the Tonga Islands and the French Colony of New Caledonia, Fiji extends across the Pacific Ocean three hundred miles from east to west, and two hundred miles from north to south. The superficial area of the group equals that of Wales, and the two largest islands are Viti Levu and Vanua Levu, each of which is more than two hundred miles in circumference. The Dutch navigator Tasman first discovered Fiji in 1643, yet little was known of the islands until Commodore Wilkes, of the United States Exploring Expedition, wrote an interesting account of them more than thirty years ago. Situate between the meridians of 176° east and 178° west longitude, and the parallels of 15° and 20° south latitude, the climate is tropical, but, as such, is by means unhealthy.

The face of the country usually presents an irregular outline of hill and dale, and the diversified scenery with its evergreen vegetation exhibits a variety of pictures of great natural beauty. Hills rise with a varied ascent and reach an elevation of from one to two thousand feet, whilst in Viti Levu they attain an altitude of more than four thousand feet. These attract the clouds and the annual rainfall in such districts is considerably over two hundred inches. Rivers are therefore numerous,

and some are of greater dimensions than strangers would anticipate. The Rewa, Ba, Singotoka, Nadi, and other useful streams are met with in Viti Levu, and the first named, in its windings, is more than 100 miles in length; whilst in Vanua Levu the Ndreketi is of considerable importance to the settlers. The sources of some of these have never been explored, as the interior of the former island is still in the possession of cannibals, who have hitherto effectually prevented the white man from penetrating into their territories. The rivers, however, are usually shallow, and therefore not of that commercial value which their width would seem to indicate. The hills are well timbered, but none of the local kinds of woods has, as yet, assumed any mercantile importance; the importation of kauri from New Zealand supplying the wants of the white community. More than two hundred varieties of fern abound, and as the climate is never below 60° degrees, plants grow with unsurpassed rapidity. Being south of the equator, the seasons are the opposite to those of Great Britain, the coolest months being July and August, whilst in February and March the heat is intense. For the last nine months of the year no great atmospheric disturbances are experienced, but January, February, and March are locally designated 'the hurricane months.' In the early part of the year the probabilities of 'a hurricane' occurring is the leading topic of conversation, and its destructiveness in former years dilated on. Such violent storms, however, do not recur annually, for nine consecutive years have passed without any, nor did they occur in '72 and '73; but in February last a heavy gale passed over some portions of the group. And after all, hurricanes in Fiji do not equal in severity the gales which usually visit the English shores during the winter months. Nevertheless the wind blows with sufficient force to blow down the houses of the natives, uproot cotton, snap asunder cocoa-nut trees, destroy banana plantations, and generally damage the growing crops. Shipping disasters, with loss of life, are common during a hurricane, but such casualties might, in many instances, be avoided by the

adoption of the most ordinary precautions.

The extreme range of the thermometer is about 30 degrees, the highest reading not being more than 97 degrees; but the enervating influences of the climate will be apparent when it is remembered that the nights are only a few degrees cooler than the hottest portion of the day. Thus Fiji is an exhausting zone, and although fairly well adapted to white men of sound constitution is by no means a suitable country for women and children. As the annual rainfall averages upwards of one hundred and fifty inches the evaporation constantly going on is extensive, and thus the air is ever charged with more or less moisture, which assumes the form of a vapor bath. No endemic diseases prevail, and notwithstanding the wearing out nature of the climate, ordinary health, with care, may be enjoyed. The exhilarating effects, however, produced in cooler countries are never experienced by the white settler in Fiji; on the contrary, he frequently feels languid and depressed, and unwilling to make the slightest exertion. Medical theorists, in their ignorance, have sent consumptive patients to Fiji; but no greater mistake could be made, and the speedy death of such invalids is the inevitable result. Those suffering from tubercular affections need a dry and mild climate, and not the heat and moisture of tropical islands in the South Pacific Ocean.

The native inhabitants, with their scanty attire and brown skins, present evidences of their Papuan origin. They number about one hundred thousand, and more than a tenth of them are cannibals. These latter are a finer race than the so-called Christians, and the men frequently reach a height of six feet and upwards. Commonly, no clothing whatever is used by either sex among these savages. Many horrible tales have been related with assiduity concerning the atrocities of Fijian cannibals, and some of these tales are true.

But it is a well-known fact that white men in Fiji have committed atrocities equalling in enormity anything which can be adduced against the cannibals. This has been the case from the early part of this century down to the present time. The savages have no means of setting forth their case to the world, and

in the general ignorance which prevails as to their true condition, the measures which are adopted for their extirpation meet with approval. It may be asked, however, who are the greatest savages—the white men who were taught good things in their childhood, or the Fijian native who has had no teaching other than that which he derives from nature? The answer is obvious; but we turn from that in order to state that useful laws for the regulation of industries and social relations are in force in native towns, and the majority of them equal in excellence any enactments passed by the most highly civilised nations. A curious custom prevails in regard to their connubial relations. On the birth of an infant the husband lives apart from his wife for the next two or three years, and the advantages accruing to the children by such a rule are obvious; although it is the cause of Fijians never having large families.

Land tenure in Fiji is a vexed question of lasting prominence; and although the white settlers have obtained possession of some valuable tracts, yet the tactics pursued in their alleged purchases are not such as will command general approval. In regard to the native ownership of land, that excellent authority the late Mr. Consul Pritchard states:

Every inch of land in Fiji has an owner. Every parcel or tract of land has a name, and the boundaries are defined and well known. The proprietorship rests in families, the heads of families being representatives of the title. Every member of a family can use the land attaching to the family. Thus the heads of families are the nominal owners, the whole family are the actual occupiers. The family land maintains the whole family, and the members maintain the head of the family. A chief holds his lands under precisely the same tenure as head of his family, and his personal rights obtain only to the land pertaining to his family, in which right every member of his family shares, so far as to use any portion of the land. But the chief is also head of his tribe, and as such, certain rights to the whole land of the tribe appertain to him. The tribe is the family, and the chief is the head of the family. The families of a tribe maintain the chief. In war they give him their services, and follow him to the fight. In peace they supply him with food. In this way the whole tribe attains a certain collective interest in all the lands held by each family, and every parcel of land alienated contracts the source from which the collective tribal support is drawn. From this complicated tenure it is clear that the alienation of land, however large or small the tract, can be made

valid only by the collective act of the whole tribe in the persons of the ruling chief and the heads of families.

In the acquisition of land from the native owners white men have systematically disregarded the united rights, and in making questionable purchases from individuals have thus been the means of creating endless disputes. This has been the primary cause of many lamentable outrages, and in cases where overt acts of violence have not yet occurred, the bitterness arising out of such unfair transactions is still fresh in the native mind, and may, in the future, be manifested by bloody reprisals. Wars of spoliation against unoffending Fijians have been organised and undertaken by the settlers for the avowed purpose of obtaining, through such violence, the land and inheritance of the native residents; and after the acquisition of 'freehold land' by the prosecution of such successful raids, the new occupiers maintain their position by firing on all natives whenever they may appear within range. This applies to women and children as well as the men—the rule is universal—for the existence of a Fijian in any form is regarded as detrimental to the best interests of the white foreign population. It is held that the native owners must be blotted out, in order that their lands may fall into the hands of the white man, and any means whereby such a consummation may be attained is regarded with general satisfaction.

Early in this century a party of escaped English convicts from New South Wales reached Fiji, and they were the first white men to settle in the group. The Alsatia which they thus formed has ever since been an attractive retreat for malefactors from the Australasian Colonies, and these 'civilised' settlers have unhappily won for the islands an unenviable notoriety. Having transgressed the laws of other lands, it is not surprising that on their arrival in Fiji they should continue their evil practices, and it is lamentable that the influences of such a class should be dominant. Some of them are known as 'beach combers,' men of the vagrant type, who will stop at nothing in the form of vice or violence, and whose abandoned practices are only terminated by death, which usually takes place under horrifying cir-

cumstances. It was also not uncommon for men who had failed in commerce in other lands to commence anew in Fiji, and, being as aspiring as they were unscrupulous, some of these won their way to an ephemeral local reputation. It was from the last-named sources that the government movement of 1871 emanated, which has been described as having 'sprung from the soil.' The use of such a phrase, however, does not convey a right impression as to the men who banded themselves together in that organisation for their own aggrandisement at the expense of truth and justice. Gaining the ear of a Fijian Chief named Thakombau, it was suddenly announced three years ago that a Constitutional Government had been formed in his name, who was henceforth styled 'King;' while 'Ministers' who formed his 'Cabinet,' with the prefix of 'Honorable' before their names, were created with equal readiness. Locally this step was designated a *coup d'état*, and from its first appearance met with considerable opposition. Thakombau's advisers, however, declared that they had a right to create a kingdom after the model of Hawaii, putting forward this very questionable precedent for the unlooked for development of affairs in Fiji. Those who took a prominent share in the movement were British subjects, and as their proceedings were clearly illegal, the Colonial Secretary of New South Wales, Sir James Martin, ably pointed out this in a despatch to the Colonial Office, in which it was made clear that the establishment of authority on such a basis must be followed by mischievous results. Similar views had been anticipated by Mr. Consul March in his admirable representations to the Foreign Office, who had the advantage of being on the spot, and thus a personal knowledge of those who shared in the initiatory measures of the so-called government. His reports ably set forth the unhappy condition of affairs, the local opposition to the movement, and the certainty of its leading to anarchy and commercial depression if permitted to remain in force. Notwithstanding the moderation and clearness with which such trustworthy men recorded their unbiassed opinions in regard to Fijian affairs, the new government was recognised by Mr. Gladstone's administration,

which unwisely conceded to it the right of exercising authority within the group. Matters of fact appear to have been wholly disregarded, fallacious representations gained the ascendancy, and Thakombau's officials took advantage of their success, and carried out their administration in the most intolerant spirit. This despotic sway, in combination with the greatest recklessness, intensified the prevailing opposition, which spread among the natives as well as the white settlers. The Fijians, however, were unable in their incohesiveness to organize any important resistance; but the settlers acted in concert, and their unity becoming formidable, more than once threatened to overthrow Thakombau's rule. Fifteen months ago the Government forces at the Ba surrendered at discretion to the settlers, but such success was short-lived, as the British naval authorities in Fijian waters nullified that advantage by removing, as prisoners, two leaders of the movement, and intimated that the Fijian authorities must be obeyed. These prisoners were detained for a fortnight, when they were unconditionally released without any charges whatever being preferred against them. Were it not for the muddling and illegal interference of British naval officers in affairs ashore, the Fijian Government would not have outlived the first year of its life; but instead of pursuing a policy of non-interference, the naval power was utilized for the purpose of maintaining in authority that iniquitous combination. One of the results of the Government movement is that a debt of more than 80,000*l.* has been created, and there are neither any public works to show how such an amount might have been disbursed, nor is any information forthcoming as to the manner in which that sum has been expended. This expenditure is in addition to the revenue which has been raised, and which has been estimated to reach the sum of 40,000*l.*

In 1859 the question of the annexation of the Fiji Islands by Great Britain was first mooted, and the Duke of Newcastle despatched Colonel Smythe, R.A., as a Special Commissioner, to make inquiries on the spot. Several influential chiefs had then signed an offer of cession, but in the result the proposition was declined. The scattered settlers, however, never for-

got the annexation movement; and four years ago a numerous signed petition in its favor was deposited by them with Mr. Consul March for transmission to the Foreign Office. That department took no official notice of the document, and Mr. MacArthur, in his place in the House of Commons, brought forward a resolution in favor of annexation in 1872. This was rejected by Parliament; but on its renewal last year, Mr. Gladstone admitted that the state of things in Fiji demanded an alteration. Accordingly Commodore Goodenough and Mr. Consul Layard were instructed to inquire into the state of affairs, and commencing their labors in January, brought them to a close in March. Thakombau, Maafu, Tui Cakau, and other chiefs, have declared in favor of British rule; but the terms certainly cannot meet with the concurrence of Her Majesty's Government. In Thakombau's formal notification of his acquiescence in such a change, interested parties have inserted a stipulation that the annual payment of 3,000*l.* be allowed him, with reversion to his eldest son. It is evident that the agreement in question will not be ratified by the British Government unless a modification of such conditions takes place, and England may for a second time decline to annex the Fiji Islands. In that case a feeling of profound disappointment would prevail throughout Australia and New Zealand, as Fiji is of much interest to the colonists of those countries, and more especially to the mercantile community of Sydney, Melbourne, and Auckland.

There are no indigenous quadrupeds in Fiji, and their absence has given rise to the theory that in consequence of the natives being without animal food, they took to cannibalism. This, however, is untenable, as the Fijians are surrounded with an abundance of fish, as well as of vegetables and fruits; and these are the favorite articles of food among Polynesian natives. Pigs are now numerous in most parts, and often form a repast among the native race when roasted whole. No noxious reptiles are encountered in any direction, and this is surprising enough when the climate is remembered, and their increasing numbers throughout the Australian continent. Varieties of lizards are seen in considerable numbers, and some are of large size and singular beauty, but they are quite harmless. Centipedes are troublesome, and

sometimes bite those with whom they come in contact; but as the only result is a slight local inflammation, no alarm is felt at their presence. Sharks are plentiful in Fijian waters, and many horrible tales are told of their voracity. In some parts handsome sea-snakes are very numerous, and they frequently crawl up the mooring chains, and thus get on board of ships. They grow a length of from four to six feet, and are prettily marked; but as they are inoffensive creatures, they are rather petted than otherwise.

Birds of many descriptions are very plentiful in the hills, but they show their sagacity by avoiding the haunts of man, and remaining in the seclusion of the primeval forest. Magnificent pigeons, and a variety of birds of the parrot-tribe, abound in the woods, whilst manifold species of waterfowl are plentifully met with on the rivers, affording much diversion to the sportsman. No birds are to be seen in the air at Levuka, and their presence is missed by anyone who remembers England and its abundance of feathered life.

The numerous coral-reefs and abundance of submarine growths of manifold colors are full of interest to the naturalist. The reef belt is commonly irregular in its width and course, fringing the shores at varying distances of one or two miles; but there is a striking uniformity in its relation to the level of the sea. Wherever a line of reefs exists, they form an effectual break-water to the huge rollers of the open sea, and at low tides are partially left high and dry; thus within their boundaries natural harbors are formed of great depth and security. But why openings should exist here and there of divers widths (by which means ships of all sizes reach safe anchorages) remains to be satisfactorily explained. The protection which is thus afforded by the reefs is of great advantage to shipping, although on the other hand it frequently renders the navigation both tortuous and dangerous.

Few places of greater interest to conchologists can be named than Fiji, and the lover of marine shells can easily collect a variety of rare and beautiful specimens. The conch shell is used by the natives as a kind of trumpet, and a blast from it by an experienced performer can be heard at considerable distances. Many descriptions of excellent fish abound along the

coast as well as the fresh-water rivers; and numbers of them, of more or less delicacy, can easily be secured, enough to satisfy the wants of a large population.

Ten years ago the only articles of export produced by the settlers were coconut oil, cotton, biche de mer, tortoiseshell, and fibre, of an annual value of 20,000*l.*; whereas at the present time, in addition to the foregoing, the products for exportation are maize, copra, cocoa-nuts, pea-nuts, and occasionally oranges and bananas; reaching a yearly value of upwards of 120,000*l.* A few years ago considerable excitement prevailed throughout the group in regard to the alleged success in the cultivation of cotton, the news of which reaching Sydney and Auckland fired the imagination of many at a period of depression in the Australasian Colonies. The unexpected popularity thus arising for the enterprise of cotton planting was based on fallacious reasoning; still no one doubted that the most sanguine expectations of the settlers would be realized. This caused an influx of strangers who were eager to embark in the culture of cotton, and many, without the slightest knowledge of the subject, or even of the cultivation of the soil, hurriedly risked all their means in such undertakings. After a trial of several years those who became cotton planters have learned their mistake. Cotton is grown, but at a loss; and the general embarrassment is such that every planter is, more or less, in monetary difficulties. Individually, however, they are in the possession of valuable tracts of land; and as the sugar cane grows with great luxuriance, it is contended that by the erection of suitable machinery for sugar-making a prosperous era will ere long dawn upon the settlers. Capitalists are unwilling to invest their money in Fijian securities in the absence of a government inspiring confidence, and without the establishment of a stable administration the impecuniosity of the settlers will become even more apparent. Tobacco arrives at maturity in ten weeks, and four crops of maize and three of cotton can be raised in a year. Sugar cane becomes ripe fifteen months after planting, and in consequence of the uniform rainfall a satisfactory moisture is noticeable on turning up the soil at any season of the year. Thus the growth of vegetation never receives any check. Rice, nutmegs, pepper, coffee, india rubber, indigo, tur-

meric, arrowroot, sago, tapioca, cinnamon, and other useful products could be advantageously cultivated and prepared for the home markets. In many districts the land is unsurpassed for its fertility, and ordinary qualities are also to be met with; but in the absence of its systematic and intelligent cultivation no statements of its actual value have, as yet, been satisfactorily set forth. Bread fruit, yams, taro, pine apples, bananas, limes, oranges, with other vegetables and fruits, grow in profusion, and afford a means of subsistence both to the native and foreign population. No mineral riches have, as yet, been developed, although there can be no doubt of the existence of valuable metalliferous beds in Viti Levu.

Three years ago the white settlers numbered more than two thousand, but in consequence of the obnoxious measures of the Fijian Government one-half of the white population left the group for the Australasian Colonies. In the event, however, of Fiji becoming a British Colony, the numbers of arrivals will be unprecedented; and in that case the white population would speedily reach several thousands. It appears that the present offer of Fiji to England remains open for a year, and pending the decision of Her Majesty's Government in the matter the administration of the country has been placed in the hands of the British Consul.

There is only one Episcopalian minister in Fiji—the Rev. W. Floyd, who had the courage to take up his abode at Levuka upwards of three years ago with the approval of the Bishop of Melbourne. His advent was regarded with considerable jealousy by the Wesleyan missionaries, who, as extensive owners of land in the town named, prevented him for some time from obtaining a suitable site for a church. By justifiable stratagem, however, the Wesleyans were ultimately checkmated; as a friend of the Church of England obtained from them a long lease of an excellent piece of land within the town for no specific purpose, and on gaining possession he generously made an offer of the same to Mr. Floyd, which was accepted. A pretty church was soon erected, and Mr. Floyd's self-denial as well as his zealous and useful

ministrations have deservedly rendered him very popular. Catholic missionaries have been located in the group nearly thirty years, and the Wesleyans about the same time. Father Breheret, who is the principal of the former, was among the first arrivals, and his unselfish labors have been of great usefulness to the natives.

By the extended cultivation of the soil, although in a primitive form, a demand was created for laborers; and the introduction of Polynesian immigrants for that purpose, from surrounding groups of islands, came into practice. In the absence of a suitable supervision by plantation visitation and the useful restraints of wholesome laws, those who shared in this traffic were guilty of the most inhuman acts against unoffending Polynesians. Thousands were wrongfully removed from their island homes by persons navigating British and other vessels, and in carrying out such atrocities many lives were violently sacrificed. White men in the South Pacific Ocean openly say to strangers to such regions, that '*killing niggers is quite as good sport as shooting partridges in England.*' Attention has, in many ways, been directed to this abominable system; but in spite of the promises of amendment it is evident that no effectual means have, as yet, been adopted for the prevention of such fearful outrages. Moreover those, respecting whose capture faithful particulars have been duly published, still remain on Fijian plantations in a state of slavery. Without labor, it is true, commerce cannot exist, but it is a recognised fact that suitable plantation hands could be introduced into Fiji and abuses prevented without imperiling progressive agricultural and mercantile interests. Such a beneficial change however, will never be realised unless authoritative measures are taken to place the labor traffic on a legitimate footing, and under vigilant official supervision.

There can be no doubt that under any ordinarily fair administration the natural resources of Fiji would be largely developed; with the known productiveness of its soil new enterprises would spring into life, and no small degree of lasting and general prosperity might be confidently looked forward to.—*Fraser's Magazine.*

A DEFENCE OF MODERN SPIRITUALISM.

BY ALFRED RUSSELL WALLACE.

Part II.

SPIRIT-PHOTOGRAPHS.

WE now approach a subject which cannot be omitted in any impartial sketch of the evidences of Spiritualism, since it is that which furnishes perhaps the most unassailable demonstration it is possible to obtain, of the objective reality of spiritual forms, and also of the truthful nature of the evidence furnished by seers when they describe figures visible to themselves alone. It has been already indicated—and it is a fact, of which the records of Spiritualism furnish ample proof—that different individuals possess the power of seeing such forms and figures in very variable degrees. Thus, it often happens at a séance, that some will see distinct lights of which they will describe the form, appearance, and position, while others will see nothing at all. If only one or two persons see the lights, the rest will naturally impute it to their imagination; but there are cases in which only one or two of those present are unable to see them. There are also cases in which all see them, but in very different degrees of distinctness; yet that they see the same objects is proved by their all agreeing as to the position and the movement of the lights. Again, what some see as merely luminous clouds, others will see as distinct human forms, either partial or entire. In other cases all present see the form—whether hand, face, or entire figure—with equal distinctness. Again, the objective reality of these appearances is sometimes proved by their being touched, or by their being seen to move objects,—in some cases heard to speak, in others seen to write, by several persons at one and the same time; the figure seen or the writing produced being sometimes unmistakably recognizable as that of some deceased friend. A volume could easily be filled with records of this class of appearances, authenticated by place, date, and names of witnesses; and a considerable selection is to be found in the works of Mr. Robert Dale Owen.

Now, at this point, an inquirer, who had not pre-judged the question, and who did not believe his own knowledge of the

universe to be so complete as to justify him in rejecting all evidence for facts which he had hitherto considered to be in the highest degree improbable, might fairly say, "Your evidence for the appearance of visible, tangible, spiritual forms, is very strong; but I should like to have them submitted to a crucial test, which would quite settle the question of the possibility of their being due to a coincident delusion of several senses of several persons at the same time; and, if satisfactory, would demonstrate their objective reality in a way nothing else can do. If they really reflect or emit light which makes them visible to human eyes, *they can be photographed*. Photograph them, and you will have an unanswerable proof that your human witnesses are trustworthy." Two years ago we could only have replied to this very proper suggestion, that we believed it had been done and could be again done, but that we had no satisfactory evidence to offer. Now, however, we are in a position to state, not only that it has been frequently done, but that the evidence is of such a nature as to satisfy any one who will take the trouble carefully to examine it. This evidence we will now lay before our readers, and we venture to think they will acknowledge it to be most remarkable.

Before doing so it may be as well to clear away a popular misconception. Mr. Lewes advised the Dialectical Committee to distinguish carefully between "facts and inferences from facts." This is especially necessary in the case of what are called spirit-photographs. The figures which occur in these, when not produced by any human agency, may be of "spiritual" origin, without being figures "of spirits." There is much evidence to show that they are, in some cases, forms produced by invisible intelligences, but distinct from them. In other cases the intelligence appears to clothe itself with matter capable of being perceived by us; but even then it does not follow that the form produced is the actual image of the spiritual form. It may be but a reproduction of the former mortal form with its terrestrial accompaniments, *for purposes of recognition*.

Most persons have heard of these "ghost-pictures," and how easily they can be made to order by any photographer, and are therefore disposed to think they can be of no use as evidence. But a little consideration will show them that the means by which sham ghosts can be manufactured being so well known to all photographers, it becomes easy to apply tests or arrange conditions so as to prevent imposition. The following are some of the more obvious :—

1. If a person with a knowledge of photography takes his own glass plates, examines the camera used and all the accessories, and watches the whole process of taking a picture, then, if any definite form appears on the negative, besides the sitter, it is a proof that some object was present capable of reflecting or emitting the actinic rays, although invisible to those present. 2. If an unmistakable likeness appears of a deceased person totally unknown to the photographer. 3. If figures appear on the negative having a definite relation to the figure of the sitter, who chooses his own position, attitude, and accompaniments, it is a proof that invisible figures were really there. 4. If a figure appears draped in white, and partly behind the dark body of the sitter without in the least showing through, it is a proof that the white figure was there at the same time, because the dark parts of the negative are transparent, and any white picture in any way superposed would show through. 5. Even should none of these tests be applied, yet if a medium, quite independent of the photographer, sees and describes a figure during the sitting, and an exactly corresponding figure appears on the plate, it is a proof that such a figure was there.

Every one of these tests have now been successfully applied in our own country, as the following outline of the facts will show.

The accounts of spirit-photography in several parts of the United States caused many spiritualists in this country to make experiments; but for a long time without success. Mr. and Mrs. Guppy, who are both amateur photographers, tried at their own house, and failed. In March, 1872, they went one day to Mr. Hudson's, a photographer living near them (not a spiritualist) to get some *cartes de visite* of Mrs. Guppy. After the sitting the idea suddenly struck Mr. Guppy that he would try for a spirit-

photograph. He sat down, told Mrs. G. to go behind the background, and had a picture taken. There came out behind him a large, indefinite, oval, white patch, somewhat resembling the outline of a draped figure. Mrs. Guppy, behind the background, was dressed in black. This is the first spirit-photograph taken in England, and it is perhaps more satisfactory on account of the suddenness of the impulse under which it was taken, and the great white patch which no impostor would have attempted to produce, and which taken by itself, utterly spoils the picture. A few days afterwards, Mr. and Mrs. Guppy and their little boy went without any notice. Mrs. Guppy sat on the ground holding the boy on a stool. Her husband stood behind looking on. The picture thus produced is most remarkable. A tall female figure, finely draped in white, gauzy robes, stands directly behind and above the sitters, looking down on them, and holding its open hands over their heads, as if giving a benediction. The face is somewhat Eastern, and, with the hands, is beautifully defined. The white robes pass behind the sitters' dark figures without in the least showing through. A second picture was then taken as soon as a plate could be prepared; and it was fortunate it was so, for it resulted in a most remarkable test. Mrs. Guppy again knelt with the boy; but this time she did not stoop so much, and her head was higher. The same white figure comes out equally well defined, but *it has changed its position in a manner exactly corresponding to the slight change of Mrs. Guppy's position.* The hands were before on a level; now one is raised considerably higher than the other, so as to keep it about the same distance from Mrs. Guppy's head as it was before. The folds of the drapery all correspondingly differ, and the head is slightly turned. Here, then, one of two things is absolutely certain. Either there was a living, intelligent, but invisible being present, or Mr. and Mrs. Guppy, the photographer, and some fourth person, planned a wicked imposture, and have maintained it ever since. Knowing Mr. and Mrs. Guppy so well as I do, I feel an absolute conviction that they are as incapable of an imposture of this kind as any earnest inquirer after truth in the department of natural science.

The report of these pictures soon spread. Spiritualists in great numbers came to try

for similar results, with varying degrees of success; till after a time rumor of imposture arose, and it is now firmly believed by many, from suspicious appearances on the pictures and from other circumstances, that a large number of shams have been produced. It is certainly not to be wondered at if it be so. The photographer, remember, was not a spiritualist, and was utterly puzzled at the pictures above described. Scores of persons came to him, and he saw that they were satisfied if they got a second figure with themselves, and dissatisfied if they did not. He *may* have made arrangements by which to satisfy everybody. One thing is clear; that if there has been imposture, it was at once detected by spiritualists themselves; if not, then spiritualists have been quick in noticing what appeared to indicate it. Those, however, who most strongly assert imposture allow that a large number of genuine pictures have been taken. But, true or not, the cry of imposture did good, since it showed the necessity for tests and for independent confirmation of the facts.

The test of clearly recognisable likenesses of deceased friends has often been obtained. Mr. William Howitt, who went without previous notice, obtained likenesses of two sons, many years dead, and of the very existence of one of which even the friend who accompanied Mr. Howitt was ignorant. The likenesses were instantly recognised by Mrs. Howitt; and Mr. Howitt declares them to be "perfect and unmistakable." (*Spiritual Magazine*, Oct., 1872.) Dr. Thomson of Clifton, obtained a photograph of himself, accompanied by that of a lady he did not know. He sent it to his uncle in Scotland, simply asking if he recognised a resemblance to any of the family deceased. The reply was that it was the likeness of Dr. Thomson's own mother, who died at his birth; and there being no picture of her in existence, he had no idea what she was like. The uncle very naturally remarked, that he "could not understand how it was done." (*Spiritual Magazine*, Oct., 1873.) Many other instances of recognition have occurred, but I will only add my personal testimony. A few weeks back I myself went to the same photographer's for the first time, and obtained a most unmistakable likeness of a deceased relative. We will now pass to a better class of evidence, the private experiments of amateurs.

Mr. Thomas Slater, an old-established optician in the Euston Road, and an amateur photographer, took with him to Mr. Hudson's, a new camera of his own manufacture and his own glasses, saw everything done, and obtained a portrait with a second figure on it. He then began experimenting in his own private house, and during last summer obtained some remarkable results. The first of his successes contains two heads by the side of a portrait of his sister. One of these heads is unmistakably the late Lord Brougham's; the other, much less distinct, is recognised by Mr. Slater as that of Robert Owen, whom he knew intimately up to the time of his death. He has since obtained several excellent pictures of the same class. One in particular shows a female in black and white flowing robes, standing by the side of Mr. Slater. In another the head and bust appears, leaning over his shoulder. The faces of these two are much alike, and other members of the family recognise them as likenesses of Mr. Slater's mother, who died when he was an infant. In another a pretty child figure, also draped, stands beside Mr. Slater's little boy. Now, whether these figures are correctly identified or not, is not the essential point. The fact that *any* figures, so clear and unmistakably human in appearance as these, should appear on plates taken in his own private studio by an experienced optician and amateur photographer, who makes all his apparatus himself, and with no one present but the members of his own family—is the real marvel. In one case a second figure appeared on a plate with himself, taken by Mr. Slater when he was absolutely alone—by the simple process of occupying the sitter's chair after uncapping the camera. He and his family being themselves mediums, they require no extraneous assistance; and this may, perhaps, be the reason why he has succeeded so well. One of the most extraordinary pictures obtained by Mr. Slater is a full-length portrait of his sister, in which there is no second figure, but the sitter appears covered all over with a kind of transparent lace drapery, which on examination is seen to be wholly made up of shaded circles of different sizes, quite unlike any material fabric I have seen or heard of.

Mr. Slater has himself shown me all these pictures and explained the conditions under which they were produced. That

they are not impostures is certain; and as the first independent confirmations of what had been previously obtained only through professional photographers, their value is inestimable.

A less successful, but not perhaps on that account less satisfactory confirmation has been obtained by another amateur, who, after eighteen months of experiment, obtained a partial success. Mr. R. Williams, M.A., Ph.D., of Hayward's Heath, succeeded last summer in obtaining three photographs, each with part of a human form besides the sitter, one having the features distinctly marked. Subsequently another was obtained, with a well-formed figure of a man standing at the side of the sitter, but while being developed, this figure faded away entirely. Mr. Williams assures me (in a letter) that in these experiments there was "no room for trick or for the production of these figures by any known means."

The editor of the *British Journal of Photography* has made experiments at Mr. Hudson's studio, taking his own collodion and new plates, and doing everything himself, yet there were "abnormal appearances" on the pictures although no distinct figures.

We now come to the valuable and conclusive experiments of Mr John Beattie of Clifton, a retired photographer of twenty years experience, and of whom the above-mentioned editor says:—"Every one who knows Mr. Beattie will give him credit for being a thoughtful, skilful, and intelligent photographer, one of the last men in the world to be easily deceived, at least in matters relating to photography, and one quite incapable of deceiving others."

Mr. Beattie has been assisted in his researches by Dr. Thomson, an Edinburgh M.D., who has practised photography as an amateur, for twenty-five years. They experimented at the studio of a friend, who was not a spiritualist (but who became a medium during the experiments), and had the services of a tradesman with whom they were well acquainted, as a medium. The whole of the photographic work was done by Messrs. Beattie and Thomson, the other two sitting at a small table. The pictures were taken in series of three, within a few seconds of each other, and several of these series were taken at each sitting. The figures produced are for the most part not human, but variously form-

ed and shaded white patches, which in successive pictures change their form and develop as it were into a more perfect or complete type. Thus, one set of five begins with two white somewhat angular patches over the middle sitter, and ends with a rude but unmistakable white female figure, covering the larger part of the plate. The other three show intermediate states, indicating a continuous change of form from the first figure to the last. Another set (of four pictures) begins with a white vertical cylinder over the body of the medium, and a shorter one on his head. These change their form in the second and third, and in the last become laterally spread out into luminous masses resembling nebulae. Another set of three is very curious. The first has an oblique flowing luminous patch from the table to the ground; in the second this has changed to a white serpentine column, ending in a point above the medium's head; in the third the column has become broader and somewhat double, with the curve in an opposite direction, and with a head-like termination. The change of the curvature may have some connection with a change in the position of the sitters, which is seen to have taken place between the second and the third of this set. There are two others, taken, like all the preceding, in 1872, but which the medium described during the exposure. The first, he said, was a thick, white fog; and the picture came out all shaded white, with not a trace of any of the sitters. The other was described as a fog with a figure standing in it; and here a white human figure is alone seen in the almost uniform foggy surface. During the experiments made in 1873, the medium, in every case, minutely and correctly described the appearances which afterwards came out on the plate. In one there is a luminous rayed star of large size, with a human face faintly visible in the centre. This is the last of three in which the star developed, and the whole were accurately described by the medium. In another set of three, the medium first described,—“a light behind him, coming from the floor.” The next,—“a light rising over another person's arms, coming from his own boot.” The third,—“there is the same light, but now a column comes up through the table, and it is hot to my hands.” Then he suddenly exclaimed,—“What a bright light up there! Can you

not see it?" pointing to it with his hand. All this most accurately describes the three pictures, and in the last, the medium's hand is seen pointing to a white patch which appears overhead. There are other curious developments, the nature of which is already sufficiently indicated; but one very startling single picture must be mentioned. During the exposure one medium said he saw on the background a black figure, the other medium saw a light figure by the side of the black one. In the picture both these figures appear, the light one very faintly, the black one much more distinctly, of a gigantic size, with a massive coarse-featured face and long hair. (*Spiritual Magazine*, January and August, 1873, *Photographic News*, June 28, 1872.)

Mr. Beattie has been so good as to send me for examination a complete set of these most extraordinary photographs, thirty-two in number, and has furnished me with any particulars I desired. I have described them as correctly as I am able; and Dr. Thomson has authorized me to use his name as confirming Mr. Beattie's account of the conditions under which they appeared. These experiments were not made without labor and perseverance. Sometimes twenty consecutive pictures produced absolutely nothing unusual. Hundreds have been taken, and more than half have been complete failures. But the successes have been well worth the labor. They demonstrate the fact that what a medium or sensitive sees (even where no one else sees anything) may often have an objective existence. They teach us that perhaps the bookseller, Nicolai of Berlin—whose case has been quoted *ad nauseam* as the type of a "spectral illusion"—saw real beings after all; and that, had photography been then discovered and properly applied, we might now have the portraits of the invisible men and women who crowded his room. They give us hints of a process by which the figures seen at séances may have to be gradually formed or developed, and enable us better to understand the statements repeatedly made by the communicating intelligences, that it is very difficult to produce definite visible and tangible forms, and that it can only be done under a rare combination of favorable conditions.

We find, then, that three amateur photographers working independently in different parts of England, separately confirm

the fact of spirit-photography,—already demonstrated to the satisfaction of many who had tested it through professional photographers. The experiments of Mr. Beattie and Dr. Thomson are alone absolutely conclusive; and, taken in connection with those of Mr. Slater and Dr. Williams, and the test photographs, like those of Mrs. Guppy, establish as a scientific fact the objective existence of invisible human forms, and definite invisible actinic images. Before leaving the photographic phenomena we have to notice two curious points in connection with them. The actinic action of the spirit-forms is peculiar, and much more rapid than that of the light reflected from ordinary material forms; for the figures start out the moment the developing fluid touches them, while the figure of the sitter appears much later. Mr. Beattie noticed this throughout his experiments, and I was myself much struck with it when watching the development of three pictures recently taken at Mr. Hudson's. The second figure, though by no means bright, always came out long before any other part of the picture. The other singular thing is, the copious drapery in which these forms are almost always enveloped, so as to show only just what is necessary for recognition, of the face and figure. The explanation given of this is, that the human form is more difficult to materialise than drapery. The conventional "white-sheeted ghost" was not then all fancy, but had a foundation in fact,—a fact, too, of deep significance, dependent on the laws of a yet unknown chemistry.

SUMMARY OF THE MORE IMPORTANT MANIFESTATIONS, PHYSICAL AND MENTAL.

As we have not been able to give an account of many curious facts which occur with the various classes of mediums, the following catalogue of the more important and well-characterized phenomena may be useful. They may be grouped provisionally, as, Physical, or those in which material objects are acted on, or apparently material bodies produced; and, Mental, or those which consist in the exhibition by the medium of powers or faculties not possessed in the normal state.

The principal physical phenomena are the following:—

1. *Simple Physical Phenomena*.—Producing sounds of all kinds, from a delicate

tick to blows like those of a heavy sledge-hammer. Altering the weight of bodies. Moving bodies without human agency. Raising bodies into the air. Conveying bodies to a distance out of and into closed rooms. Releasing mediums from every description of bonds, even from welded iron rings, as has happened in America.

2. *Chemical*.—Preserving from the effects of fire, as already detailed.

3. *Direct Writing and Drawing*.—Producing writing or drawing on marked papers, placed in such positions that no human hand (or foot) can touch them. Sometimes, visibly to the spectators, a pencil rising up and writing or drawing apparently by itself. Some of the drawings in many colors have been produced on marked paper in from ten to twenty seconds, and the colors found wet. (See Mr. Coleman's evidence, in "Dialectical Report," p. 143, confirmed by Lord Borthwick, p. 150.) Mr. Thomas Slater of 136 Euston Road, is now obtaining communication in the following manner:—A bit of slate pencil an eighth of an inch long is laid on a table; a clean slate is laid over this, in a well-lighted room; the sound of writing is then heard, and in a few minutes a communication of considerable length is found distinctly written. At other times the slate is held between himself and another person, their other hands being joined. Some of these communications are philosophical discussions on the nature of spirit and matter, supporting the usual spiritual theory on this subject.

4. *Musical Phenomena*.—Musical instruments, of various kinds, played without human agency, from a hand-bell to a closed piano. With some mediums, and where the conditions are favorable, original musical compositions of a very high character are produced. This occurs with Mr. Home.

5. *Spiritual Forms*.—These are either luminous appearances, sparks, stars, globes of light, luminous clouds, &c.; or, hands, faces, or entire human figures, generally covered with flowing drapery; except a portion of the face and hands. The human forms are often capable of moving solid objects, and are both visible and tangible to all present. In other cases they are only visible to seers, but when this is the case it sometimes happens that the seer describes the figure as lifting a flower or a pen, and others present see the

flower or the pen apparently move by itself. In some cases they speak distinctly; in others the voice is heard by all, the form only seen by the medium. The flowing robes of these forms have in some cases been examined, and pieces cut off, which have in a short time melted away. Flowers are also brought, some of which fade away and vanish; others are real, and can be kept indefinitely. It must not be concluded that any of these forms are actual spirits; they are probably only temporary forms produced by spirits for purposes of test, or of recognition by their friends. This is the account invariably given of them by communications obtained in various ways; so that the objection once thought to be so crushing—that there can be no "ghosts" of clothes, armor, or walking-sticks—ceases to have any weight.

6. *Spiritual Photographs*.—These, as just detailed, demonstrate by a purely physical experiment the trustworthiness of the preceding class of observations.

We now come to the mental phenomena, of which the following are the chief:—

1. *Automatic Writing*.—The medium writes involuntarily; often matter which he is not thinking about, does not expect, and does not like. Occasionally definite and correct information is given of facts of which the medium has not, nor ever had, any knowledge. Sometimes future events are accurately predicted. The writing takes place either by the hand or through a planchette. Often the handwriting changes. Sometimes it is written backwards; sometimes in languages the medium does not understand.

2. *Seeing, or Clairvoyance and Clairaudience*.—This is of various kinds. Some mediums see the forms of deceased persons unknown to them, and describe their peculiarities so minutely that their friends at once recognize them. They often hear voices, through which they obtain names, date, and place, connected with the individuals so described. Others read sealed letters in any language, and write appropriate answers.

3. *Trance-speaking*.—The medium goes into a more or less unconscious state, and then speaks, often on matters and in a style far beyond his own capacities. Thus, Serjeant Cox—no mean judge on a matter of literary style—says, "I have heard an uneducated barman, when in a state of trance, maintain a dialogue with

a party of philosophers on 'Reason and Foreknowledge, Will and Fate,' and hold his own against them. I have put to him the most difficult questions in psychology, and received answers, always thoughtful, often full of wisdom, and invariably conveyed in choice and elegant language. Nevertheless a quarter of an hour afterwards, when released from the trance, he was unable to answer the simplest query on a philosophical subject, and was even at a loss for sufficient language to express a commonplace idea" ("What am I?" vol. ii., p. 242.) That this is not overstated I can myself testify, from repeated observation of the same medium. And from other trance-speakers—such as Mrs. Hardinge, Mrs. Tappan, and Mr. Peebles—I have heard discourses which, for high and sustained eloquence, noble thoughts, and high moral purpose, surpassed the best efforts of any preacher or lecturer within my experience.

4. *Impersonation.*—This occurs during trance. The medium seems taken possession of by another being; speaks, looks, and acts the character in a most marvelous manner; in some cases speaks foreign languages never even heard in the normal state; as in the case of Miss Edmonds, already given. When the influence is violent or painful, the effects are such as have been in all ages imputed to possession by evil spirits.

5. *Healing.*—There are various forms of this. Sometimes by mere laying on of hands, an exalted form of simple mesmeric healing. Sometimes, in the trance state, the medium at once discovers the hidden malady, and prescribes for it, often describing very exactly the morbid appearance of internal organs.

The purely mental phenomena are generally of no use as evidence to non-spiritualists, except in those few cases where rigid tests can be applied; but they are so intimately connected with the physical series, and often so interwoven with them, that no one who has sufficient experience to satisfy him of the reality of the former, fails to see that the latter form part of the general system, and are dependent on the same agencies.

With the physical series the case is very different. They form a connected body of evidence, from the simplest to the most complex and astounding, every single component fact of which can be, and has

been, repeatedly demonstrated by itself; while each gives weight and confirmation to all the rest. They have all, or nearly all, been before the world for twenty years; the theories and explanations of reviewers and critics do not touch them, or in any way satisfy any sane man who has repeatedly witnessed them; they have been tested and examined by sceptics of every grade of incredulity, men in every way qualified to detect imposture or to discover natural causes—trained physicists, medical men, lawyers, and men of business—but in every case the investigators have either retired baffled, or become converts.

There have, it is true, been some impostors who have attempted to imitate the phenomena; but such cases are few in number, and have been discovered by tests far less severe than those to which the genuine phenomena have been submitted over and over again; and a large proportion of these phenomena have never been imitated, because they are beyond successful imitation.

Now what do our leaders of public opinion say, when a scientific man of proved ability again observes a large portion of the more extraordinary phenomena, in his own house, under test conditions, and affirms their objective reality; and this not after a hasty examination, but after four years of research? Men "with heavy scientific appendages to their names" refuse to examine them when invited; the eminent society of which he is a fellow refuses to record them; and the press cries out that it wants better witnesses than Mr. Crookes, and that such facts want "confirmation" before they can be believed. But why more confirmation? And when again "confirmed," who is to confirm the confirmer? After the whole range of the phenomena had been before the world ten years, and had convinced sceptics by tens of thousands—sceptics, be it remembered, of common sense and more than common acuteness, Americans of all classes—they were confirmed by the first chemist in America, Professor Robert Hare. Two years later they were again confirmed by the elaborate and persevering inquiries of one of the first American lawyers, Judge Edmonds. Then by another good chemist, Professor Mapes. In France the truth of the simpler physical phenomena was confirmed by Count A.

de Gasparin in 1854; and since then French astronomers, mathematicians, and chemists of high rank have *confirmed* them. Professor Thury of Geneva again *confirmed* them in 1855. In our own country such men as Professor de Morgan, Dr. Lockhart Robertson, T. Adolphus Trollope, Dr. Robert Chambers, Serjeant Cox, Mr. C. F. Varley, as well as the sceptical Dialectical Committee, have independently *confirmed* large portions of them; and lastly comes Mr. William Crookes, F.R.S., with four years of research and unrestricted experiment with the two oldest and most remarkable mediums in the world, and again *confirms* almost the whole series! But even this is not all. Through an independent set of most competent observers we have the crucial test of photography; a witness which cannot be deceived, which has no preconceived opinions, which cannot register "subjective" impressions; a thoroughly scientific witness, who is admitted into our law courts, and whose testimony is good as against any number of recollections of what did happen or opinions as to what ought to and must have happened. And what have the other side brought against this overwhelming array of consistent and unimpeachable evidence? They have merely made absurd and inadequate suppositions, but have not disproved or explained away one weighty fact!

My position, therefore, is, that the phenomena of Spiritualism in their entirety do *not* require further confirmation. They are proved quite as well as any facts are proved in other sciences; and it is not denial or quibbling that can disprove any of them, but only fresh facts and accurate deductions from those facts. When the opponents of Spiritualism can give a record of their researches approaching in duration and completeness to those of its advocates; and when they can discover and show in detail, either how the phenomena are produced or how the many sane and able men here referred to have been deluded into a coincident belief that they have witnessed them; and when they can prove the correctness of their theory by producing a like belief in a body of equally sane and able unbelievers,—then, and not till then, will it be necessary for spiritualists to produce fresh confirmation of facts which are, and always have been, sufficiently real and indisputable to satisfy any honest and persevering inquirer.

This being the state of the case as regards evidence and proof, we are fully justified in taking the *facts* of modern Spiritualism (and with them the spiritual theory as the only tenable one) as being fully established. It only remains to give a brief account of the more important uses and teachings of Spiritualism.

HISTORICAL TEACHINGS OF SPIRITUALISM.

The lessons which modern Spiritualism teaches may be classed under two heads. In the first place, we find that it gives a rational account of various phenomena in human history which physical science has been unable to explain, and has therefore rejected or ignored; and, in the second, we derive from it some definite information as to man's nature and destiny, and, founded on this, an ethical system of great practical efficacy. The following are some of the more important phenomena of history and of human nature which science cannot deal with, but which Spiritualism explains:—

1. It is no small thing that the spiritualist finds himself able to rehabilitate Socrates as a sane man, and his "demon" as an intelligent spiritual being who accompanied him through life,—in other words, a guardian spirit. The non-spiritualist is obliged to look upon one of the greatest men in human history, not only as subject all his life to a mental illusion, but as being so weak, foolish, or superstitious as never to discover that it was an illusion. He is obliged to disbelieve the fact asserted by contemporaries and by Socrates himself, that it forewarned him truly of dangers; and to hold that this noble man, this subtle reasoner, this religious sceptic, who was looked up to with veneration and love by the great men who were his pupils, was imposed upon by his own fancies, and never during a long life found out that they were fancies, and that their supposed monitions were as often wrong as right. It is a positive mental relief not to have to think thus of Socrates.

2. Spiritualism allows us to believe that the oracles of antiquity were not all impostures; that a whole people, perhaps the most intellectually acute who ever existed, were not all dupes. In discussing the question, "Why the Prophetess Pythia giveth no Answers now from the Oracle in Verse," Plutarch tells us that when kings and states consulted the oracle on weighty

matters that might do harm if made public, the replies were couched in enigmatical language; but when private persons asked about their own affairs they got direct answers in the plainest terms, so that some people even complained of their simplicity and directness, as being unworthy of a divine origin. And he adds this positive testimony: "Her answers, though submitted to the severest scrutiny, have never proved false or incorrect. On the contrary, the verification of them has filled the temple with gifts from all parts of Greece and foreign countries." And again, "The answer of Pythoness proceeds to the very truth, without any diversion, circuit, fraud, or ambiguity. It has never yet, in a single instance, been convicted of falsehood." Would such statements be made by such a writer, if these oracles were all the mere guesses of impostors? The fact that they declined and ultimately failed, is wholly in their favor; for why should imposture cease as the world became less enlightened and more superstitious? Neither does the fact that the priests could sometimes be bribed to give out false oracles prove anything, against such statements as that of Plutarch and the belief during many generations, supported by ever recurring experiences, of the greatest men of antiquity. That belief could only have been formed by demonstrative facts; and modern Spiritualism enables us to understand the nature of those facts.

3. Both the Old and the New Testaments are full of Spiritualism, and spiritualists alone can read the record with an enlightened belief. The hand that wrote upon the wall at Belshazzar's feast, and the three men unhurt in Nebuchadnezzar's fiery furnace, are for them actual facts which they need not explain away. St. Paul's language about "spiritual gifts," and "trying the spirits," is to them intelligible language, and the "gift of tongues" a simple fact. When Christ cast out "devils" or evil spirits, he really did so—not merely startle a madman into momentary quiescence; and the water changed into wine, as well as the bread and fishes continually renewed till five thousand men were fed, are credible as extreme manifestations of a power which is still daily at work among us.

4. The miracles of the saints, when well attested, come into the same cate-

gory. Those of St. Bernard, for instance, were often performed in broad day before thousands of spectators, and were recorded by eye-witnesses. He was himself greatly troubled by them, wondering why this power was bestowed upon him, and fearing lest it should make him less humble. This was not the frame of mind, nor was St. Bernard's the character, of a deluded enthusiast. The spiritualist need not believe that all this never happened; or that St. Francis d'Assisi and St. Theresa were not raised into the air, as eye-witnesses declared they were.

5. Witchcraft and witchcraft trials have a new interest for the spiritualist. He is able to detect hundreds of curious and minute coincidences with phenomena he has himself witnessed; he is able to separate the *facts* from the absurd *inferences*, which people imbued with the frightful superstition of diabolism drew from them, and from which false inferences all the horrors of the witchcraft mania arose. Spiritualism, and Spiritualism alone, gives a rational explanation of witchcraft, and determines how much of it was objective fact, how much subjective illusion.

6. Modern Roman Catholic miracles become intelligible facts. Spirits whose affections and passions are strongly excited in favor of Catholicism, produce those appearances of the Virgin and of saints which they know will tend to increased religious fervor. The appearance itself may be an objective reality; while it is only an inference that it is the Virgin Mary,—an inference which every intelligent spiritualist would repudiate as in the highest degree improbable.

7. Second-sight, and many of the so-called superstitions of savages may be realities. It is well known that mediumistic power is more frequent and more energetic in mountainous countries; and as these are generally inhabited by the less civilised races, the beliefs that are more prevalent there may be due to facts which are more prevalent, and be wrongly imputed to the coincident ignorance. It is known to spiritualists that the pure dry air of California led to more powerful and more startling manifestations than in any other part of the United States.

8. The recently discussed question of the efficacy of prayer receives a perfect solution by Spiritualism. Prayer may be often answered, though not directly by the

Deity. Nor does the answer depend wholly on the morality or the religion of the petitioner; but as men who are both moral and religious, and are firm believers in a divine reponse to prayer, will pray more frequently, more earnestly, and more disinterestedly, they will attract towards them a number of spiritual beings who sympathise with them, and who, when the necessary mediumistic power is present, will be able, as they are often willing, to answer the prayer. A striking case is that of George Müller, of Bristol, who has now for forty-four years depended wholly for his own support, and that of his wonderful charities, on answer to prayer. His "Narrative of Some of the Lord's Dealings with George Müller" (6th Ed. 1860), should have been referred to in the late discussion, since it furnishes a better demonstration that prayer is sometimes really answered than the hospital experiment proposed by Sir Henry Thomson could possibly have done. In this work we have a precise yearly statement of his receipts and expenditure for many years. He never asked any one or allowed any one to be asked, directly or indirectly, for a penny. No subscriptions or collections were ever made; yet from 1830 (when he married without any income whatever) he has lived, brought up a family, and established institutions which have steadily increased, till now four thousand orphan children are educated and in part supported. It has happened hundreds of times, that there has been no food in his house and no money to buy any, or no food or milk or sugar for the children. Yet he never took a loaf or any other article on credit even for a day; and during the thirty years over which his narrative extends, neither he nor the hundreds of children dependent upon him for their daily food have ever been without a regular meal! They have lived, literally, from hand to mouth; and his one and only resource has been secret prayer. Here is a case which has been going on in the midst of us for forty years, and is still going on; it has been published to the world for many years, yet a warm discussion is carried on by eminent men as to the fact of whether prayer is or is not answered, and not one of them exhibits the least knowledge of this most pertinent and illustrative phenomenon! The spiritualist explains all this as a personal influence. The perfect simplicity, faith, boundless charity,

and goodness of George Müller, have enlisted in his cause beings of a like nature; and his mediumistic powers have enabled them to work for him by influencing others to send him money, food, clothes, &c., all arriving, as we should say, just in the nick of time. The numerous letters he received with these gifts, describing the sudden and uncontrollable impulse the donors felt to send him a certain definite sum at a certain fixed time, such being the exact sum he was in want of, and had prayed for, strikingly illustrates the nature of the power at work. All this might be explained away, if it were partial and discontinuous; but when it continued to supply the daily wants of a life of unexampled charity, *for which no provision in advance was ever made* (for that Müller considered would show want of trust in God), no such explanation can cover the facts.

9. Spiritualism enables us to comprehend and find a place for, that long series of disturbances and occult phenomena of various kinds, which occurred previous to what are termed the modern Spiritual manifestations. Robert Dale Owen's works give a rather full account of this class of phenomena, which are most accurately recorded and philosophically treated by him. This is not the place to refer to them in detail; but one of them may be mentioned as showing how large an amount of unexplained mystery there was, even in our own country, before the world heard anything of modern Spiritualism. In 1841, Major Edward Moor, F.R.S., published a little book called "Bealings Bells," giving an account of mysterious bell-ringing in his house at Great Bealings, Suffolk, and which continued for fifty-three days. Every attempt to discover the cause, by himself, friends, and bell-hangers were fruitless; and by no efforts, however violent, could the same clamorous and rapid ringing be produced. He wrote an account to the newspapers, requesting information bearing on the subject, when, in addition to certain wise suggestions—of rats or a monkey as efficient causes—he received fourteen communications, all relating cases of mysterious bell-ringing in different parts of England, many of them lasting much longer than Major Moor's, and all remaining equally unexplained. One lasted eighteen months; another was in Greenwich Hospital, where neither clerk-of-the-works, bell-hanger, nor men of science

could discover the cause. One clergyman wrote of disturbances of a most serious kind continued in his parsonage for *nine years*, and he was able to trace back their existence in the same house for *sixty years*. Another case had lasted *twenty years*, and could be traced back for a *century*. Some of the details of these cases are most instructive. Trick is absolutely the most incredible of all explanations. Spiritualism furnishes the explanation by means of analogous facts occurring every day, and forming part of the great system of phenomena which demonstrates the spiritual theory. Major Moor's book is very rare; but a good abstract of it is given in Owen's "Debateable Land," pp. 239-258.

MORAL TEACHINGS OF SPIRITUALISM.

We have now to explain the Theory of Human Nature, which is the outcome of the phenomena taken in their entirety, and is also more or less explicitly taught by the communications which purport to come from spirits. It may be briefly outlined as follows:—

1. Man is a duality, consisting of an organized spiritual form, evolved coincidently with and permeating the physical body, and having corresponding organs and development.
2. Death is the separation of this duality, and effects no change in the spirit, morally or intellectually.
3. Progressive evolution of the intellectual and moral nature is the destiny of individuals; the knowledge, attainments, and experience of earth-life forming the basis of spirit-life.
4. Spirits can communicate through properly-endowed mediums. They are attracted to those they love or sympathise with, and strive to warn, protect, and influence them for good, by mental impression when they cannot effect any more direct communication; but as follows from clause (2), their communications will be fallible, and must be judged and tested just as we do those of our fellow-men.

The foregoing outline propositions will suggest a number of questions and difficulties, for the answers to which readers are referred to the works of R. D. Owen, Hudson Tuttle, Professor Hare, and the records of Spiritualism *passim*. Here I must pass on to explain with some amount of detail, how the theory leads to a pure

system of morality with sanctions far more powerful and effective than any which either religious systems or philosophy have put forth.

This part of the subject cannot perhaps be better introduced, than by referring to some remarks by Professor Huxley in a letter to the Committee of the Dialectical Society. He says,—“But supposing the phenomena to be genuine—they do not interest me. If anybody would endow me with the faculty of listening to the chatter of old women and curates at the nearest cathedral town, I should decline the privilege, having better things to do. And if the folk in the spiritual world do not talk more wisely and sensibly than their friends report them to do, I put them in the same category.” This passage, written with the caustic satire in which the kind-hearted Professor occasionally indulges, can hardly mean, that if it were proved that men really continued to live after the death of the body, that fact would not interest him, merely because some of them talked twaddle? Many scientific men deny the spiritual source of the manifestations, on the ground that real, genuine spirits might reasonably be expected not to indulge in the common-place trivialities which do undoubtedly form the staple of ordinary spiritual communications. But surely Professor Huxley, as a naturalist and philosopher, would not admit this to be a reasonable expectation. Does he not hold the doctrine that there can be no effect, mental or physical, without an adequate cause; and that mental states, faculties, and idiosyncrasies, that are the result of gradual development and life-long—or even ancestral—habit, cannot be suddenly changed by any known or imaginable cause? And if (as the Professor would probably admit) a very large majority of those who daily depart this life are persons addicted to twaddle, persons who spend much of their time in low or trivial pursuits, persons whose pleasures are sensual rather than intellectual,—whence is to come the transforming power which is suddenly, at the mere throwing off the physical body, to change these into beings able to appreciate and delight in high and intellectual pursuits? The thing would be a miracle, the greatest of miracles, and surely Professor Huxley is the last man to contemplate innumerable miracles as part of the order of nature; and all for what?

Merely to save these people from the necessary consequences of their misspent lives. For the essential teaching of Spiritualism is, that we are, all of us, in every act and thought, helping to build up a "mental fabric," which will be and constitute ourselves, more completely after the death of the body than it does now. Just as this fabric is well or ill built, so will our progress and happiness be aided or retarded. Just in proportion as we have developed our higher intellectual and moral nature, or starved it by disuse and by giving undue prominence to those faculties which secure us mere physical or selfish enjoyment, shall we be well or ill fitted for the new life we enter on. The noble teaching of Herbert Spencer, that men are best educated by being left to suffer the natural consequences of their actions, is the teaching of Spiritualism as regards the transition to another phase of life. There will be no imposed rewards or punishments; but every one will suffer the natural and inevitable consequences of a well or ill-spent life. The well-spent life is that in which those faculties which regard our personal physical well-being, are subordinated to those which regard our social and intellectual well-being, and the well-being of others; and that inherent feeling—which is so universal and so difficult to account for—that these latter constitute our higher nature, seems also to point to the conclusion that we are intended for a condition in which the former will be almost wholly unnecessary, and will gradually become rudimentary through disuse, while the latter will receive a corresponding development.

Although, therefore, the twaddle and triviality of so many of the communications is not one whit more interesting to sensible spiritualists than it is to Professor Huxley, and is never voluntarily listened to, yet the fact that such poor stuff is talked (supposing it to come from spirits) is both a fact that might have been anticipated and a lesson of deep import. We must remember, too, the character of the séances at which these common-place communications are received. A miscellaneous assemblage of believers of various grades and tastes, but mostly in search of an evening's amusement, and of sceptics who look upon all the others as either fools or knaves, is not likely to attract to itself the more elevated and refined deni-

zens of the higher spheres, who may well be supposed to feel too much interest in their own new and grand intellectual existence to waste their energies on either class. If the fact is proved, that people continue to talk after they are dead with just as little sense as when alive, but that, being in a state in which sense, both common and uncommon, is of far greater importance to happiness than it is here (where fools pass very comfortable lives), they suffer the penalty of having neglected to cultivate their minds; and being so much out of their element in a world where all pleasures are mental, they endeavor to recall old times by gossiping with their former associates whenever they can find the means—Professor Huxley will not fail to see its vast importance as an incentive to that higher education which he is never weary of advocating. He would assuredly be interested in anything having a really practical bearing on the present as well as on the future condition of men; and it is evident that even these low and despised phenomena of Spiritualism, "if true," have this bearing, and, combined with its higher teachings, constitute a great moral agency which may yet regenerate the world.

For the spiritualist who, by daily experience, gets absolute knowledge of these facts regarding the future state—who knows that, just in proportion as he indulges in passion, or selfishness, or the exclusive pursuit of wealth, and neglects to cultivate the affections and the varied powers of his mind, so does he inevitably prepare for himself misery in a world in which there are no physical wants to be provided for, no sensual enjoyments except those directly associated with the affections and sympathies, no occupations but those having for their objects social and intellectual progress—is impelled towards a pure, a sympathetic, and an intellectual life by motives far stronger than any which either religion or philosophy can supply. He dreads to give way to passion or to falsehood, to selfishness or to a life of luxurious physical enjoyment, because he knows that the natural and inevitable consequences of such habits are future misery, necessitating a long and arduous struggle in order to develop anew the faculties, whose exercise long disuse has rendered painful to him. He will be deterred from crime by the knowledge that its unforeseen consequences may cause him ages of remorse;

while the bad passions which it encourages will be a perpetual torment to himself in a state of being in which mental emotions can not be laid aside or forgotten amid the fierce struggles and sensual pleasures of a physical existence. It must be remembered that these beliefs (unlike those of theology) will have a living efficacy, because they depend on *facts* occurring again and again in the family circle, constantly reiterating the same truths as the result of personal knowledge, and thus bringing home to the mind even of the most obtuse, the absolute reality of that future existence in which our degree of happiness or misery will be directly dependent on the "mental fabric" we construct by our daily thoughts, and words, and actions here.

Contrast this system of natural and inevitable reward and retribution, dependent wholly on the proportionate development of our higher mental and moral nature, with the arbitrary system of rewards and punishments dependent on stated acts and beliefs only, as set forth by all dogmatic religions; and who can fail to see that the former is in harmony with the whole order of nature—the latter opposed to it? Yet it is actually said that spiritualism is altogether either imposture or delusion, and all its teachings but the product of "expectant attention" and "unconscious cerebration"! If none of the long series of demonstrative facts which have been here sketched out, existed, and its only product were this theory of a future state, that alone would negative such a supposition. And when it is considered that mediums of all grades, whether intelligent or ignorant, and having communications given through them in various direct and indirect ways, are absolutely in accord as to the main features of this theory, what becomes of the gross misstatement that nothing is given through mediums but what they know and believe themselves? The mediums have, almost all, been brought up in some of the usual orthodox beliefs. How is it, then, that the usual orthodox notions of heaven are *never* confirmed through them?

In the scores of volumes and pamphlets of spiritual literature I have read, I have found no statement of a spirit describing "winged angels," or "golden harps," or the "throne of God"—to which the humblest orthodox Christian thinks he will be

introduced if he goes to heaven at all. There is no more startling and radical opposition to be found between the most diverse religious creeds, than that between the beliefs in which the majority of mediums have been brought up and the doctrines as to a future life that are delivered through them; there is nothing more marvellous in the history of the human mind than the fact that, whether in the backwoods of America or in country towns in England, ignorant men and women having almost all been brought up in the usual sectarian notions of heaven and hell, should, the moment they become seized by the strange power of mediumship, give forth teachings on this subject which are philosophical rather than religious, and which differ wholly from what had been so deeply ingrained into their minds. And this statement is not affected by the fact that communications purport to come from Catholic or Protestant, Mahomedan or Hindoo spirits. Because, while such communications maintain special *dogmas* and *doctrines*, yet they confirm the *very facts* which really constitute the spiritual theory, and which in themselves contradict the theory of the sectarian spirits. The Roman Catholic spirit, for instance, does not describe himself as being in either the orthodox purgatory, heaven, or hell; the Evangelical Dissenter who died in the firm conviction that he should certainly "go to Jesus," never describes himself as being with Christ, or as ever having seen Him, and so on throughout. Nothing is more common than for religious people at séances to ask questions about God and Christ. In reply they never get more than opinions, or more frequently the statement that they, the spirits, have no more actual knowledge of those subjects than they had while on earth. So that the facts are all harmonious; and the very circumstance of there being sectarian spirits bears witness in two ways to the truth of the spiritual theory—it shows that the mind, with its ingrained beliefs, is not suddenly changed at death; and it shows that the communications are not the reflection of the mind of the medium, who is often of the same religion as the communicating spirit, and, because he does not get his own ideas confirmed, is obliged to call in the aid of "Satanic influence" to account for the anomaly.

The doctrine of a future state and of

the proper preparation for it as here developed, is to be found in the works of all spiritualists, in the utterances of all trance-speakers, in the communications through all mediums; and this could be proved, did space permit, by copious quotations. But it varies in form and detail in each; and just as the historian arrives at the opinions or beliefs of any age or nation, by collating the individual opinions of its best and most popular writers, so do spiritualists collate the various statements on this subject. They know well that absolute dependence is to be placed on no individual communications. They know that these are received by a complex physical and mental process, both communicator and recipient influencing the result; and they accept the teachings as to the future state of man only so far as they are repeatedly confirmed in substance (though they may differ in detail) by communications obtained under the most varied circumstances, through mediums of the most different characters and acquirements, at different times, and in distant places. Fresh converts are apt to think, that, once satisfied the communications come from their deceased friends, they may implicitly trust to them, and apply them universally; as if the vast spiritual world was all moulded to one pattern, instead of being, as it almost certainly is, a thousand times more varied than human society on earth is, or ever has been. The fact that the communications do not agree as to the condition, occupations, pleasures, and capacities, of individual spirits, so far from being a difficulty, as has been absurdly supposed, is what ought to have been expected; while the agreement on the essential features of what we have stated to be the spiritual theory of a future state of existence, is all the more striking, and tends to establish that theory as a fundamental truth.

The assertion so often made, that Spiritualism is the survival or revival of old superstitions, is so utterly unfounded as to be hardly worth notice. A science of human nature which is founded on observed facts; which appeals only to facts and experiment; which takes no beliefs on trust; which inculcates investigation and self-reliance as the first duties of intelligent beings; which teaches that happiness in a future life can be secured by cultivating and developing to the utmost

the higher faculties of our intellectual and moral nature *and by no other method*,—is and must be the natural enemy of all superstition. Spiritualism is an experimental science, and affords the only sure foundation for a true philosophy and a pure religion. It abolishes the terms “supernatural” and “miracle” by an extension of the sphere of law and the realm of nature; and in doing so it takes up and explains whatever is true in the superstitions and so-called miracles of all ages. It, and it alone, is able to harmonise conflicting creeds; and it must ultimately lead to concord among mankind in the matter of religion, which has for so many ages been the source of unceasing discord and incalculable evil;—and it will be able to do this because it appeals to evidence instead of faith, and substitutes facts for opinions; and is thus able to demonstrate the source of much of the teaching that men have so often held to be divine.

It will thus be seen, that those who can form no higher conception of the uses of Spiritualism, “even if true,” than to detect crime or to name in advance the winner of the Derby, not only prove their own ignorance of the whole subject, but exhibit in a marked degree that partial mental paralysis, the result of a century of materialistic thought, which renders so many men unable seriously to conceive the possibility of a natural continuation of human life after the death of the body. It will be seen also that spiritualism is no mere “physiological” curiosity, no mere indication of some hitherto unknown “law of nature;” but that it is a science of vast extent, having the widest, the most important, and the most practical issues, and as such should enlist the sympathies alike of moralists, philosophers, and politicians, and of all who have at heart the improvement of society and the permanent elevation of human nature.

In concluding this necessarily imperfect though somewhat lengthy account of a subject about which so little is probably known to most of the readers of the *Fortnightly Review*, I would earnestly beg them not to satisfy themselves with a minute criticism of single facts, the evidence for which, in my brief survey, may be imperfect; but to weigh carefully the mass of evidence I have adduced, considering its wide range and various bearings. I

would ask them to look rather at the results produced by the evidence than at the evidence itself as imperfectly stated by me; to consider the long roll of men of ability who, commencing the inquiry as sceptics left it as believers, and to give these men credit for not having overlooked, during years of patient inquiry, difficulties which at once occur to themselves. I would ask them to ponder well on the fact, that no earnest inquirer has ever come to a conclusion adverse to the reality of the phenomena; and that no spiritualist has ever yet given them up as false. I would ask them, finally, to dwell upon the long series of facts in human history

that Spiritualism explains, and on the noble and satisfying theory of a future life that it unfolds. If they will do this, I feel confident that the result I have alone aimed at will be attained; which is, to remove the prejudices and misconceptions with which the whole subject has been surrounded, and to incite to unbiassed and persevering examination of the facts. For the cardinal maxim of Spiritualism is, that every one must find out the truth for himself. It makes no claim to be received on hearsay evidence; but, on the other hand, it demands that it be not rejected without patient, honest, and fearless inquiry.—*Fortnightly Review*.

ADDISON.

A PERFECTLY virtuous man, orthodox, and entirely sincere in his religion; consistent in his politics, correct to a penny in his monetary affairs, filially pious, and charged with a never-failing supply of the most admirable moral sentiments, which he dispenses freely on most occasions; a perfect man of business, and an almost pedantic scholar; a man who can see no beauty in the Alps, and who considers the cathedral at Sienna, a "barbarous building": such a man surely has all the elements of one of the greatest prigs which the world has ever seen—must be a man to make virtue detestable and vice agreeable to an ordinary mind, and compete with K——g A——r for the sovereignty of boredom.

Addison was all that we have described above, but strangely enough he was neither a bore, nor a prig; on the contrary, he is in his writing what he was in his life (to those in his confidence), one of the gentlest, most genial, most kindly, and most witty men with whom we have ever met. After reading what is possible about Addison, and examining his works, what strikes one most is the intense overwhelming *love* which he had for his fellow creatures. He laughs at them and their follies, and in doing so uses a wit which is entirely his own; but even while he rebukes he never wounds. In an extremely corrupt and licentious age, his hands were always pure and his morals unimpeachable; yet he was one of the most popular and influential men of his

day. Although he had a commanding person and perfect manners, he was reputed to be dull in mixed society, where flashy brilliance was everything, and where shallow-brained, half-educated women cackled the intolerable frivolity which we read in the plays of the time; he was not fitted to shine in the drawing-rooms of the day, and he did not. He could not make a pretence of speaking in Parliament, and so was absolutely useless as a debater, yet the firm faith which those in authority had in his ability and honesty entirely counterbalanced the want of social success and brilliancy of speech—two of the most important requirements in those days for a nearly penniless politician with no family connexions. Addison, by the mere power of his personal virtues, first, and his literary ability secondly, found himself in one of the highest offices of state, kindly assisting the meanest and least grateful of those whom he had known in the old times, when without fifty pounds in his pocket he bullied the great Duke of Somerset, and won the battle. He came to a singular end after all. He married Lady Warwick. Alas! for the vanity of human wishes!

Of his personal appearance we have at least two portraits by good hands. Before us are three carefully engraved portraits of him, but there is a great dissimilarity between the three, except in the wig. Sir Godfrey Kneller painted one of these portraits, which is entirely unlike the two others; let us however give Sir

Godfrey the credit of the best picture, and judge Addison's appearance from that. The wig almost prevents our judging the shape of the head, yet it seems very high behind. The forehead is very lofty, the sort of forehead which is called "commanding" by those people who do not know that some of the least decided men in the world have had high foreheads. The eyebrows are delicately "pencilled," yet show a vast deal of vigor and expression; they are what his old Latin friends, who knew so well the power of expression in the eyebrow, would have called "supercilious"; and yet the nasal end of the supercilium is only slightly raised, and it droops pleasantly at the temporal end, so that there is nothing Satanic or ill-natured about it: the eyebrow of Addison, according to Kneller, seems to say, "You are a greater fool than you think yourself to be, but I would die sooner than tell you so." The eye, which is generally supposed to convey so much expression, but which very often does not, is very much like the eyes of other amiable and talented people. The nose is long, as becomes an orthodox Whig; quite as long, we should say, as the nose of any member of Peel's famous long-nosed ministry, and quite as delicately chiselled. The mouth is very tender and beautiful, firm, yet with a delicate curve upwards at each end of the upper lip, suggestive of a good joke, and of a calm waiting to hear if any man is going to beat it. Below the mouth there follows of course the nearly inevitable double chin of the eighteenth century, with a deep incision in the centre of the jaw bone, which shows through the flesh like a dimple. On the whole a singularly handsome and pleasant face; wanting the wonderful form which one sees in the faces of Shakespeare, Prior, Congreve, Castlereagh, Byron, or Napoleon, but still extremely fine of its kind. Decidedly that of an ἀναξ ἀνδρῶν.

To write his political life within the limits of a paper like this would be entirely impossible; we shall merely sketch it as we proceed to show, as well as we can, what Addison was and what he did. He was a Whig, and consequently Lord Macaulay has written his life and has demolished his enemies: not Addison's enemies particularly, because it may be almost said that he never had any, but the

enemies of Lord Macaulay and of the Whigs; that is to say, those people who declare that you can not sit on two stools at the same time without coming to the ground. Lord Macaulay finished up those fellows for us here and elsewhere most handsomely. Still something is left to be said of Addison, even after Lord Macaulay.

Addison was born in the Anglican communion, almost at the foot of the altar; it would be as easy to disconnect Bardolph from a tavern as Addison from a church. From almost the first thinking moment of his life, the magnificent solemnity of the reformed Anglican ritual, debased as it was in the latter end of the seventeenth and the beginning of the eighteenth century, seems to have taken possession of his mind. Pure and high-minded as he was, he faltered when asked to take holy orders—considering himself unfit for them. No thinking man ever exalted the office of priest higher than he did; no man ever denounced the abuses of that office more freely and more honestly. With a bitter and never failing contempt of the Papacy on the one hand, and an equal, though less bitter contempt of Sectarianism on the other, he passed through his life with the belief that the Anglican compromise was the only one possible between Christianity and the advancement of human knowledge.

His father was Dr. Lancelot Addison, who, had he been a turncoat in politics, would certainly have been a bishop. His mother, Miss Gulston, was daughter of a doctor of divinity, and a sister to the Bishop of Bristol. Lancelot Addison, after his residence in Barbary, well known to the readers of 'Pinkerton's Travels,' became Rector of Milston, and afterwards Archdeacon of Salisbury and Dean of Lichfield.

With such an overwhelming mass of family tradition and influence, it is not difficult to understand why Addison, though a very bold Whig in politics, was a most orthodox man in point of religion. To a mind like his, only three courses were open as regards spiritual matters; to swear by the compromise in which he had been reared; to join the Church of Rome, and believe everything; or to pitch the whole question of religion to the winds, as a mere invention of statesmen and priests for the purpose of entrapping and enslaving cowardly women, and of bringing their influence to

bear on men. He chose to adhere firmly to the traditions of his family, but by no means without thought or reason. No man was ever more true and firm in his friendships, but the highflying Churchman, Dr. Sacheverell, whose design at bottom was the singular one of an Erastian Papacy, the "dear Harry" of his youth, is by no means the "dear Harry" of his middle age. Addison had detected him for an ass, and what is more, went as near telling him so as ever he did with any man.

With such a bringing up as he had, it seems at first sight wonderful that he should not have been a Tory among Tories, yet, from some passages in his 'Italian Travels,' we see that he was more than a Whig, almost a Radical; he seems to breathe freely in the first real republic he ever saw, that of San Marino; he revels in the virtue and diligence of the free people of the mountains, as contrasted with the sloth and degradation of the inhabitants of the more fruitful plains, and declares that the most splendid court is always co-existent with the largest measure of popular misery. The first glimpse he ever had of the history of a free country was that which he got in reading the 'History of the Roman Republic,' the second, that which he had in reading the 'Histories of the Greek Republics.' The belief in republicanism never left him; it was crystallised in 'Cato.' So the upper classes send their sons to school to learn the classics; fortunately for the state of things, they are taught in an antique language, because a young nobleman construes more seditious republicanism in a week than Mr. Bradlaugh utters in a year. It sticks to some of them all their lives, as it did to Addison; with others it merely passes in at one ear and out at the other; land and beeves cure them of it rapidly. Addison had such an intense love for his kind, that he could no more help being a *social* Radical than the worst Conservative of this day: in spite of his Oxfordism he was a most hearty Whig; no Whig, either in politics or religion, made the great compromise, with Divine Right in the former or Erastianism in the latter, better or more logically than Addison. No man was ever more true to his religious or political faith: to speak of his trying to sit on two stools at once, like an ordinary Whig, is to talk nonsense: there was an almost invisible rope erected between the two stools, on

which he walked with the ease, dexterity and calm courage of a Blondin.

He was born at Milston, near Amesbury (or as it was called, Ambrosebury), in 1672. It is situated on the river Avon, just three miles from Stonehenge, but on the other, or east side of the river. When you climb the height you are on Salisbury Plain, and Stonehenge, that ghastly, barbarous piece of heathenism, stands between you and the setting sun in the short winter evenings, as though to blot it out:

"And straight the sun was flecked with bars—
Heaven's Mother, send us grace!—
As if through a dungeon grate he peered
With broad and burning face."

We must now follow him to the Charterhouse and to Oxford. Wild stories are told of his youth, such as his running away into a wood and living on berries and roots; whether blackberries or nightshade berries; whether turnip-roots or mandrakes, we are not informed; we do not happen to believe the story. At the Charterhouse he first made one of the great friendships of his life, if not the greatest, that of Richard Steele, who not only gained his confidence, but that of his father, who was extremely anxious that the two noble youths should continue their friendship. That friendship, was hardly ever interrupted, and Steele contributed enormously to the making of Addison's fortune. The 'Tatler' and 'Spectator' papers put Addison in a position such as he would scarcely have attained without them; how many lines of them should we ever have seen had it not been for the busy and audacious Steele? Steele supplied to Addison exactly what Addison wanted—confidence in himself. Nothing in the history of literature is more beautiful than the unswerving admiration which two men like Steele and Tickell had for Addison; no great literary man had such singular good fortune as had Addison when he met with Steele. The world is fearfully apt to take a man at his own valuation; had the world taken Addison at his own valuation we should have heard but little of those of his works by which he will live for ever. Steele, the bold originator and speculator, made himself his *impresario*; never for an instant comparing himself to his acknowledged master, but following him with brave and noble humility; no jackal, but a true English mastiff.

Our space will prevent us from recurring to the story of this beautiful friendship again, and we have nothing more to do with Sir Richard Steele except in the way of passing allusion. Those, however, who did us the favor to read our article on Steele the month before last*, will be glad to hear that after further looking into the matter we disbelieve the story of Addison having put an execution in Steele's house for the sum of 100*l.* owing to him. Lord Macaulay's "probable story" about the matter seems to have little or no foundation in fact; he seems to have known uncommonly little about Sir Richard Steele altogether. He says that Addison frequently assisted him when he had "drunk himself into a fever or dived himself into a sponging-house." As for Steele drinking himself into a fever, we have no evidence of the fact, though he drank a great deal too much; as for his "diving himself into a sponging-house," the accusation is rather too absurd. Steele went about in terror of having his nose slit by his consistent denunciations of gambling. That he was absurdly speculative and wildly extravagant no one will ever deny. The "probable story" of Lord Macaulay's assertion about "diving and drinking" is that they both begin with a "d" and so round off one of his charming periods.

Addison went to his father's college, Queen's College, Oxford, where he applied himself to the writing of Latin verses so diligently and with such good taste, that he was in two years† elected a "demy" of Magdalen (scholastic slang for *semi-communarius*, as the word "codd" at Charterhouse is for *condisciplus*). Among those elected with him on this occasion, when Magdalen had regained her freedom, was

that singular lunatic Sacheverell, whose impudence rises to the height of genius, and of whom Addison was very fond, as no doubt we should have been ourselves. Magdalen claims Addison as her own, though he certainly learnt or taught himself to write his Latin verses at Queen's. At Magdalen he was admitted as full fellow in 1698, at a rather late age—twenty-six. He seems to have lived on his demyship, his fellowship, and private tuition, for one gentleman is handed down to posterity as his pupil in these days, Sir John Harper. At Oxford, it is said that he was very nervous, that he kept late hours, and that he always studied after dinner. His favorite walk, as every Oxford man knows, was up and down the Cherwell, between the deer park and the mill, and generally among the meadows, about the mouths of the disemboguing sewers of Oxford, which to a mind like Addison's suggested pastoral thoughts, but which to the more practical mind of Dr. Acland suggest typhoid fever. Still we should have liked to see the handsome calm youth walking down the meadows by Iffley and Sandford, in such a wilderness of wild flowers as England can scarcely show elsewhere—fritillaries, cowslips, oxlips and orchids. One of the Realistic school of artists might find a worse subject for a picture than Addison, with his hand full of flowers, bending over some still dark pool to pick a *Butomus umbellata*, and with that singular ignorance of all physical exertion which was the characteristic of himself and others at that time, thinking that he had distinguished himself as much as one of Lord Cutt's guardsmen.

When he was little over twenty years of age, that is to say, five years before he got his fellowship, he wrote the first piece of his in English which we have. We are honestly of opinion that for feeble exaggeration it is nearly unsurpassed. Mr. Dickens' naval officer, Captain Swosser, says that if you make pitch hot you can't make it too hot. The curt sentiment is admirable; by following such we retain the empire of the ocean: still, if you are going to butter a man, is it not possible to lay it on too thick? Dryden was an excellent and most melodious poet: Addison, who was as perfectly melodious as a musical snuffbox, and had not one half-penny worth of humbug about him, calls on us to believe that Virgil, Horace, Per-

* See ECLECTIC for February, 1874.

† Tickell says "two years," Macaulay "a few months." Tickell and Mrs. Aikin seem right, Lord Macaulay seems wrong. The Rev. Mr. Magrath, of Queen's, kindly informs us that the Latin poem which attracted the notice of Dr. Lancaster, and which made him exert himself to get Addison his demyship at Magdalen, was one entitled 'Inauguratio Regis Gulielmi, 1689,' and that Addison's actual migration to Magdalen must have taken place at the end of that year or the beginning of the next; that is to say, about two years after his removal from Charterhouse in 1687. It is a very sad thing to say, but even in a paper like this it is necessary to verify Lord Macaulay wherever it is possible; he certainly belonged to the ante-Freeman school of history.

sius, and Juvenal, were all, as the Americans say, "a fizzle" to Dryden.

"Thy lines have heightened Virgil's majesty,
And Horace wonders at himself in thee;
Thou teachest Persius to inform our isle
In smoother numbers and in clearer style;
And Juvenal, instructed by thy page,
Edges his satire and improves his rage.
Thy copy casts a fairer light on all,
And still outshines the bright original."

We leave our readers to judge the above lines for themselves; it was very kind of Addison to write them to a poor broken-down old-fellow like Dryden. We love him better for doing so; they show more to make one love him than anything which that savage, ill-bred little wretch, Pope, ever wrote at his best; but they are sad nonsense, and Pope never wrote nonsense. Speaking of a man whom we thoroughly dislike, we are afraid that we must say a very bold thing of Pope: his lines are distinguished by such terrible genius, that we believe that we could recognize most couplets of his as easily as we could a line of Shakespeare's. It is lamentable to have to confess that the man Pope, for whom we have the deepest possible dislike, was a very great poet; while the man Addison, whom we love and admire beyond most men, was very little more a poet than Smollett. Possibly Campbell was right when in that astounding work 'The British Poets' he omits him altogether. But then Campbell omits Shakespeare, and does some other singular things in his wonderful book; to Milton, as a British poet, he gives three pages; to Pope two pages: they did not happen to be Scotchmen, for he gives to Thomson four pages, to Allan Ramsay six pages, and to Smollett four! Addison wrote very bad poetry, but he never got down to the level which Smollett attains in the 'Ode to Lochleven.'

We had better possibly pass on to the rest of Addison's poetry (always leaving 'Cato' to its proper place) at once, so as to have done with it. The 'Ode on St. Cecilia's Day' is an improvement on the verses to Dryden; we have no poet now who could get it published, unless he paid the cost himself. Let us say that the fault lies in the publishers.

"For ever consecrate the day
To music and Ce-cil-i-ay—
*Music, the greatest good that mortals know,
And all of Heaven we have below !"*

We should have thought differently.

We must proceed, however, to the poem which greatly helped to make Addison's fortune, 'The Campaign'; a poem which we must mention out of its place. The battle of Blenheim was fought in August, 1704. When the news arrived, Godolphin it is said, met Halifax, and asked him, as a man knowing more about polite literature than he did himself, whether he knew any one who could write a decent poem on the subject. Halifax replied that he knew of such a man, but that he would not ask him to write for a ministry who so grossly neglected gentlemen of parts and learning. Godolphin said, with good humor, that the gentleman selected by Halifax should never regret it. Halifax then mentioned Addison, which nomination may be considered to be what is called in some public schools a "shot," because there were certainly some others who might have done the thing as well. Halifax insisted on Godolphin sending to Addison himself. Godolphin wanted Addison for more than one purpose; he agreed readily, and not being inclined to do the thing by halves, got Boyle, the chancellor of the exchequer, to go to Addison, and inform him, first that he was made commissioner of appeals in the excise, and secondly, that he wanted a poem written.

That is one accepted story of the liar Budgell. Tickell, who was an honest man, tells a totally different one (Preface, p. xi.). He seems to think that Addison began the poem *proprio motu*, and he says, "The Lord Treasurer Godolphin, a fine judge of poetry (?), had a sight of the work when it was only carried on as far as the applauding smile of the angel, and approved the poem by bestowing on the author, a few days after, the place of commissioner of appeals, vacant by the removal of the famous Mr. Locke to the Council of Trade." We are rather inclined to take good Tickell's account of the matter ourselves.

The poem itself is in the nature of a university prize poem, and not remarkably good, judging it from that standard. There is a calm coolness of statement pervading it in parts, which strikes a modern reader with awe. Speaking of Queen Anne's court, he says:

"Thy favorites grow not up by fortune's sport,
Or from the crimes or follies of a court;
On the firm basis of desert they rise,
From long-tried faith and friendship's holy
ties."

There never was any one called Sarah, Duchess of Marlborough, who had saved enough to give Childs a cheque for £700,000 * to fight the Bank of England; as for Mrs. Masham, no such person ever existed.

"Big with the fate of Europe."

is a line almost repeated in 'Cato'—

"Big with the fate
Of Cato and of Rome"—

which is almost always quoted by critics and parliamentary orators as if it was all one line, and went thus :

"Big with the fate of Cato and of Rome"—

but this in passing. Let us come to our noble ragamuffins, who won the day for us; God bless every bone in their bodies, we say.

"Our British youth, with inborn freedom bold,
Unnumbered scenes of servitude behold.
Nations of slaves, with tyranny debased,
Their Maker's image more than half defaced,
Hourly instructed as they urge their toil,
To prize their Queen and love their native soil."

The fact being that the "British youth" were, after the failure of an attempt at conscription as unconstitutional, represented by "such able-bodied men as have no lawful calling or employment, or visible means for their maintenance or livelihood." A more glorious set of blackguards was probably never before hurled into astonished Europe; the last thing which they could possibly wish for was to come home again; so we accuse Addison of straining poetic licence rather strongly. But these immortal gaol-birds could fight, though we doubt whether the army of Marlborough would have simultaneously burst into tears like that of Alexander on hearing of the death of their sovereign. In our youth we used to make a foolish joke, or "sell," by running into the class-room and announcing as the latest news, "Queen Anne is dead!" Marlborough's rank and file would have been, as little affected by the

intelligence as we were. Queen Anne was not a woman to inspire profound sentiment; she ate—the sweet-tongued Duchess of Marlborough tells us—three heavy meals the day her husband died, and seems to have been rather a foolish person.

In spite of their "anger and disdain" at the burnt villages in the track of the French troops, our men were set on by Marlborough to do the same devilish work on a perfectly unoffending peasantry in a more effectual way. The devastation of Bavaria was a very horrible thing. Sir William Napier says, "The laws of war, rigorously interpreted, authorize such examples when the people take arms." Exactly; Prince Frederick Charles swore that he would burn down the village of Audun la Tige because some Wirtembergers had been attacked by the villagers. The moment he had it pointed out to him by M. Brasseur of Luxemburg that it was done by the *gardes champêtres* and *douaniers* in uniforms he said nothing more about it, and yet the Germans were hard enough on the French. Marlborough's action was without excuse: he writes to Sarah, "there having been no war in this country for sixty years, the villages are so clean that you would be pleased with them." Addison, the gentlest of human beings, palliates this atrocious act in the most fulsome way; in prose he would have died sooner than do such a thing; in adulative poetry nothing was too hot or too heavy for him too swallow.

Again, the battle of Plenheim, or Blenheim, was won by English, Dutch, Danish, Hanoverian, and Hessian troops, numbering thirty-six thousand, and Prussians, Danes, Austrians, and troops of the Empire under Prince Eugene. The English fought better than any one else, as they always do, and Marlborough had the largest share of the command; but from reading Addison's poem a youth would certainly imagine that there was not a single man on the side of Marlborough except the English, which is pretty cool as it stands. A celebrated and often quoted line in this poem—

"Rides on the whirlwind and directs the storm,"

does not, as most half-informed people believe, refer to the Deity, but to that splendid rascal the Duke of Marlborough.

* This story seems certainly true, though the actual income of the Duke and Duchess of Marlborough, as we find from other sources, was only about £70,000 a year from perquisites and places, exclusive of the estate of Blenheim. There must have been some tolerable pickings somewhere, economical as they were.

With 'Rosamond' we rather gladly leave Addison's minor pieces. We can see very little merit in it; but a far better judge than we can pretend to be, Dr. Johnson, speaks well of it. It was unsuccessful on the stage, as the music to which it was set was atrociously bad; at all events Addison could find half a dozen men in this present uneventful year for poetry who could beat him hollow at such work. The libretti to our operas are too hopelessly bad to be noticed. 'Rosamond' is better than any of them which we have seen, but still not worth reproduction.

Addison left Oxford to travel on a pension from the King, obtained by Lord Somers. He declined to take orders, but was allowed to retain his fellowship notwithstanding, and this liberty was granted to him, it is said, by the influence of Montague. When he left Oxford he was one of the finest Latinists of his or any other day, but deficient in Greek. Both Johnson and Macaulay prove that he was by no means a first-rate Greek scholar, and indeed scholars far less ripe than either of them might have guessed it by his almost persistent habit of avoiding Greek in his writings when it was possible. Miss Aikin, who admires him as much we do—but we most humbly think with less discrimination—tries to make out that he was a good Greek scholar because he was partly engaged in a translation of Herodotus with Bogle and Blackmore, which Lord Macaulay seems to think a pretty bad one. Miss Aikin must have known that Herodotus is an extremely easy book, which most under-graduates, designing for nothing but a pass, have to know at a very early period of their career. Of Addison's Latin verses much is to be said, they are undoubtedly very beautiful, even to those like ourselves, who only retain one Latin poet as our familiar friend, Horace. As a matter of course, we admire the ode to Burnet best, and those captious people who hint at it as an "Horatian cento," had better set to work and write something half as good themselves.

"Nudus liquentes plorat æther nives,
Et mox liquescent; ipse adamantinum
Fundit cacumen, dum per imas
Saxa fluunt resoluta valles."

Thomson, who possibly never read the above, has written something rather like it:

"From Penmaenmawr heaped hideous to the
sky
Tumble the smitten cliffs, while Snowdon's
verge,
Instant dissolving yields its weight of snows."

Addison at this time either could not or would not write an English letter, even to a great man, when every care was taken, which would not condemn him to any school board for the place of national school-master nowadays. The easiest way to prove this is to write one in his own language, let us say to Lord Lawrence.

"My Lord,

"I have bin detained at Callice in my Travails through a Feaver, and employed one of ye French Physicians, who are as Cheap as our English Farriers and generally as Ignorant. I should have went back to Maudlin College before but for this Accident. I wou'd write the account of my Disasters in Rhime, including my voyage to Dover, during which I lost a Cloath hat, but I have bin too Sick to appeal to you to become my Benefactour still less to write Rhimes. My Ability's are all at your l'dships Service. I h'ant yet seen the Account of these Controversys with the Sectarians, in Spight of looking eagerly for ye news. The Lanskip of England is indeed pleasant after so much foreign Travail.

"I am, my Lord,

"Your Lordships most dutiful

"And most obedient Servant,

"J. ADDISON."

Addison never wrote a letter of that length containing so many oddities at once, though they are every one authentic; but long after he took his master's degree he spelt in this manner, writing "bin" for "been," everywhere in his earlier letters, we mean those written up to twenty-six years of age. When he was a renowned and acknowledged scholar, he continued to use such solecisms and archaisms as would most certainly condemn him did he apply for a very inferior post, during the present somewhat alarming march of intellect. He would have stood not the wildest chance against Mr. Bradley Headstone or Mr. Charles Hexam. Yet the letters in which these eccentricities occur are possibly some of the most exquisitely written pieces in our language. In his published things none of these oddities oc-

cur, in his later correspondence they are wholly wanting, and we frankly confess that we miss them.

In his first letter to Halifax he confesses his ignorance of the French language, and he very wisely determined to live for a time at Blois, where he could not hear a word of English. This resolution served him in an odd way many years afterwards, at least so it is said. While Walpole could only communicate with George the First by such Latinity as he had retained from his school education, Addison could speak French to him. The Abbé Phillepeaux writes of him at Blois, "He would rise between two and three in summer, and lie between eleven and twelve in winter. He had masters generally at supper with him, and kept very little company besides. He had no amour while he was here, and I think I should have known if he had." We should think it highly probable also, but Addison's love affairs are involved in mystery, for the simple reason that he never had any. He writes once to a friend to say that he had lost an estate in the Indies, and what is worse, his mistress; but nothing seems to be known about the estate or the mistress, save that the latter, by comparison of dates, and by subsequent events, was certainly not Lady Halifax. No woman's name is in any way mixed up with Addison except that of his wife.

While we are on that subject we had better go on to another, and finish with it once for all. Addison is said to have been accused of drinking too much. We cannot find the ghost of evidence of the fact. If the fact were proved we could palliate it; could explain that he was of a delicate constitution, and that in those terribly drunken times it was nearly impossible for a man to join in society at all without taking large quantities of wine; but we simply repudiate the accusation. In writing of Steele, in January, we accepted the matter as a fact which we had heard all our lives, but on a more careful examination we dismiss it with the scorn it merits.

Addison, like most great geniuses, was a very absent man. Abbé Phillepeaux tells us that he has entered his room, and that he has been there for five minutes without Addison's speaking to him; he had, doubtless, odd ways. Had the late Dr. Johnson appeared in Fleet Street under the present police régime, previous

to Mr. Belt's disaster, he would certainly have been "run in," by the first conscientious policeman, though he never took wine for years. The motto on the cover of this magazine is, "'Sir,' said Dr. Johnson, 'let us take a walk down Fleet Street.'" By all means, we should say, but don't let us roll in our gait, count the posts, say "Boo, boo, boo," from time to time, or tell an impertinent waterman that his mother, under pretence of keeping a house of ill-fame, was a receiver of stolen goods. All these things Dr. Johnson did, and Addison never did, yet no one says that Johnson was a drunkard. The main charges against Addison are two: first that Steele was generally far too convivial before Addison began to be brilliant; and secondly, that Voltaire once saw him in a beastly state of intoxication in England. We will take the second charge first. Voltaire never saw Addison drunk, because he never saw him sober, in short, he never set eyes on him in his life, in England or elsewhere; he never arrived in England until seven years after Addison's death. Take the charge about his taking more wine than Steele. There is no proof that he did, to begin with; but even Steele, though he might have taken too much to walk steadily, does not seem to have taken too much to be witty. He was getting into a coach one night, with a view of going home, and the mob were shouting "Down with the rump!" "Up with the rump!" cried Steele, "or I shall never get home." It is very likely that Addison could not talk until Sir Richard had taken his more clumsy and demonstrative wit home to bed. Towards the small hours, it was universally admitted that there was no company comparable to his. He liked to be uninterrupted and listened to; then the nervousness which prevented his speaking in the House was gone; then with a few faithful friends he would open the storehouse of his mind, to the delight of every one who would hear him, and gave that splendid little viper Pope the opportunity to say, that he only talked among his satellites at Button's. Yet neither Pope, Swift, nor Dennis, the then most foul-mouthed men of the day, ever bring a charge of habitual intoxication against Addison; we have very little doubt that they would have done it if they could. Swift says that on one occasion he saw him take too much; that is almost the

only authority we have, and that is Swift's! We are asked to believe that the best writer in the 'Tatler,' 'Spectator,' and 'Guardian,' the author of 'Cato,' the eminent, diligent, and most incorruptible statesman—the man trusted by both parties, in an age of party, for his unimpeachable moral character, was a drunkard! We can swallow a great many things in this age of credulity, but not that.

Of all Addison's letters from France, the most interesting to us now is that to the Bishop of Lichfield after seeing Malebranche and Boileau. One hears the dead people, a generation older than Addison, speak to one in his tongue, with his voice, familiar to us almost from infancy, as the voice of one of our own family. The Spectator saw and talked with these two men. Let us hear what they said to him, putting Addison's familiar English into the English of the day.

"Père Malebranche has a particular esteem for the English nation, where I believe that he has more admirers than in his own. The French don't care for following him through his deep researches, and generally look upon the new philosophy as visionary or irreligious. He showed me a very pretty hypothesis of colors, which is different from that of Cartesius or Mr. Newton; they may all three be true. He very much praised Mr. Newton's mathematics, shook his head at the name of Hobbes, and told me he thought him a *faux esprit*.

"Among other learned men, I had the honor to be introduced to Mr. Boileau. He is a little old and deaf, but talks incomparably well in his own calling. He heartily hates an ill poet, and throws himself in a passion when he talks of any one who has not a high respect for Homer and Virgil. I don't know whether there is more of old age or truth in his censures on the French writers, but he wonderfully decried the present and extols very much his former cotemporaries, especially his two friends Arnaud and Racine. I asked him whether he thought 'Télémaque' was not a good modern piece. He spoke of it with a good deal of esteem, and said that it gave us a better notion of Homer's way of writing than any translation of his works could do; but that it falls short, however, of the Odyssey; for Mentor, he says, is eternally preaching, but Ulysses shows us everything in his character and behavior

that the other is still pressing on us by his precepts and instructions. We commonly find the man who makes the best friend is the worst enemy. Corneille was a good poet, but not among the best of tragic writers, for that he declaimed too frequently, and made very fine descriptions when there was no occasion for them. He instanced in his 'Pompey,' where, in the first scene, the king of Egypt runs into a very pompous and long description of the battle of Pharsalia, though he was then in a very great hurry of affairs and had not himself been present at it."

Having now perfected himself in the French tongue he was selected to attend Prince Eugene's army as secretary for William III.; the sudden accidental death of the king however, upset, not only the calculations of Defoe and Steele, but also those of Addison. He returned from his travels a poorer and a wiser man, and only first got employment after writing 'The Campaign.'

But advancement rapidly came. He was made under-secretary, then he was made secretary to Lord Wharton, the lord lieutenant of Ireland.* Our space forbids us to follow him through the career of well deserved services which preceded his early death; the history of his successive posts may be seen with perfect correctness in the most unambitious biographical dictionary. In an age of gross corruption he was incorrupt, pure and clean-handed; the Tories tried to buy him, but, as the man they set on him said, "*He was not a man to be talked to.*" At a period when the press had been set free by the Revolution, and when a literary man was of necessity, willy-nilly, politician; when literary tigers, wolves, and jackals, like Swift, Pope and Dennis, were abroad to fight for the last shreds of a man's reputation, his remained intact. In politics he served his friends faithfully and without even a suspicion of jobbery; in literature he stood absolutely supreme, as much through sheer goodness as through overpowering ability; for the most foul-mouthed could only give abuse for abuse, while every one of the writers

* What a splendid tongue Wharton must have had! When the twelve new peers were pitchforked into the House of Lords by Anne, he rose and asked them if they were going to vote through their *foreman*.

of the time, short of the maniac Dennis, seemed fearful of making the gentle Addison angry. When a woman takes to scolding, her influence is gone; she has played her last card, and after all, scolding breaks no bones. The terrible woman is the woman who never scolds, but who might; the *gentle* woman is the one whose anger you dare not face. It is so among men: a general officer may call a man all the names in creation, but he has done that to the last man, and will probably do it to the next; *n'importe*. But one look of rebuke from a man like the late Mr. Maurice has more power than the fiercest denunciations. A youth listens to an ordinary "wiggling" with mingled feelings of irritation and amusement; the silently expressed anger of a Maurice or an Arnold, even over some neglected task, is far more terrible. Dennis once howled madly at Addison; Pope ventured to enter the lists without leave; Addison gave Pope a quiet rebuke which he never forgot.

Previous to his first advancement he certainly was poor, but always most honorably so. Few things are more amusing than his cool treatment of the haughty Duke of Somerset, and the story shows the man so well that it is worth repeating. He was selected to attend the army of Prince Eugene, but the death of the King of course put an end to his pension and hopes for the time being. He was thrown pretty nearly on his own resources, but what those were he gives us very little information. He was still in debt at Oxford, after the manner of those times and of some more recent; it is most likely that he had nothing at all but his fellowship. If Tickell knew anything of his affairs at this time, which is improbable, it would not be at all likely that he would publish them; the pecuniary affairs of the late Right Hon. Joseph Addison, wife of the Countess of Warwick, would best be left alone by his literary executors. Swift writes:

"Thus Addison, by lords caressed,
Was left in foreign lands distressed.
Forgot at home, became the hire
Of travelling tutor to a squire;
But wisely left the Muses' hill;
To business shaped the poet's quill,
Let all his barren humors fade,
Took up himself the courtier's trade;
And grown a minister of state,
Saw poets at his levee wait."

This is a beautiful specimen of Swift; every line is as false as the man who wrote it. Addison was not forgotten by Halifax and Somers, because they gave him the mission to Prince Eugene; he did not desert poetry and literature, because he at once took to it and made his fortune by it; he was not travelling tutor to a squire, because he coolly and contemptuously repudiated the terms so degradingly offered to him by one of the richest and most powerful men in England. The Duke of Somerset wrote to Tonson to find him a travelling tutor for his son, Lord Hertford. Tonson at once suggested Addison, who he knew would be very likely to accept any offer consonant with his dignity. The Duke writes to Tonson: "Mr. Mainwaring tells me that you had received a letter from Mr. Addison, in which he seems to embrace the proposal, but wishes to know the Particulars." The Duke writes in another letter: "As to what you say of Mr. Addison—I should have been much more satisfied had he made his own proposals. I desire that he may be more on the account of a companion in my son's travels than as a governor, and as such I shall account him. No expenses shall cost him sixpence, and over and above that, my son shall present him at the year's end with a *hundred guineas* as long as he is pleased to continue in that service to my son, by taking great care of him, by his personal attendance and advice." Such was the offer. Addison replies that he will attend "My L^d Marquess of Hartford in his Travails," but that he has lately received one or two advantageous offers of the same nature, "so I can't think of taking the employ from any other hands. As for the recompense that is proposed to me, I must take the liberty to assure your Grace that I should not see my account in it, but in the hopes to recommend myself to your Grace's favor and approbation." The Duke was very angry, and broke off the negotiation most abruptly.

While passing over, as a mere matter of current and popular history, Addison's political and public advance, there is a small storm in a teacup about which a great deal more has been written than need have been: Addison's great and singular interest in the boy Warwick. Some say that he was his tutor, but there is no evidence for that, though Johnson seems to think so. Thyer says that he was his

travelling companion in Italy; if so, Addison must have been attended by a wet-nurse for the baby's refreshment, as Lord Warwick happened to be in arms at that time. It is puzzling at first to find an under-secretary of state writing to a young cub of ten years old as "My dear Lord," and telling him that he has been hunting after birds' nests for him. Is not the simple and probable truth this; that even at that time Addison was contemplating a future union with Warwick's mother?

We now approach the subject of Addison's great tragedy, 'Cato.' It seems at first likely that Lord Macaulay is right when he says that he got the first idea of it from an absurd play which he saw acted at Venice; though on the other hand Tickell places the origin of it at a much earlier period, and Tickell ought to know best. At any rate he had the first four acts by him for a very long period, possibly fourteen years: it came out in 1713. It was, as all the world knows, a very great success, and was translated into every European language. To us it seems wonderful that the man who has *infinitely* distanced every man who ever lived in his social essays—that a man who in his *Tatlers* and *Spectators* has written paper after paper of the most genial and admirable wit, could have produced anything so hopelessly dull. Every character not a prig is a villain, and the women are worse prigs than the men. Some people lately have taken exceptions to K—g A—r, as being too prosy for human nature to stand; to such people we could reply in the words of Polonius:

"He is for a jig . . . or he sleeps."

But Cato really does go too far for human patience. He is so horribly better than all his neighbors (except Juba, a young gentleman of color, who has "caught" Roman virtue from him as ordinary mortals take the small-pox, without apparent reason,) that fallen human nature enlists itself in a solemn league against him, and is glad when he stabs himself, hoping that he is dead, and that there is an end of him. Not a bit of it. When Mr. Pecksniff gets so drunk that he has to be carried to bed, Jenkins supposes that he will stay there; but no, Mr. Pecksniff appears on the landing in his shirt, charged with new moral sentiments. It is so with Cato; after his cowardly act of

suicide he re-appears on the stage to die, and is just as virtuous as ever.

Forgive, blessed shade of Addison, our laughter! Conceive the man who wrote the ninety-third 'Spectator' writing 'Cato'! Why did you, nearly the most pure and perfect wit of your century, *ever publish it*? Why *did* you listen to Steele, Tickell, and others about such a great matter, and not use your own judgment, which was in reality the correct one, as far as regards posterity? *You* distrusted it, and you were right. It would not in the least degree have mattered if any one else had written it; it would have sunk or swum, would have been applauded at the time, and have sunk into obscurity afterwards; but a man with Addison's reputation was ill advised when he published a fifth-class play, and that a dull one. From one end to the other there is not one ghost of an approach to the tender and exquisite grace which we find everywhere in his 'Spectator.' Hogarth was of opinion that he could paint great historical subjects, and he tried, and thought he had succeeded; but in venturing out of his *métier* he never did worse than Addison did in 'Cato.' It might be thought impossible that such a genius as Addison's should wholly fail where there is an opportunity for soft human sympathy to have its play; but no! Cato's son Marcus is killed; the whole scene is remarkably good, except that that dreadful negro Juba will insist on uttering moral sentiments worthy of a debating club in Liberia, which may be compared to Cato and water. On meeting his son's corpse, Cato very nearly forgets the Whig in the father:

"Cato, meeting the corpse.—

"Welcome, my son! here lay him down, my friends,

Full in my sight that I may view at leisure
The bloody corse, and count these glorious wounds.

How beautiful is death when earned by virtue!

Who would not be that youth! What pity is it

That we can die but once to serve our country.

Portius! behold thy brother and remember,
Thy life is not thine own when Rome demands it.

"Juba.—Was ever man like this?"

We should say not, ourselves, and most profoundly hope not; but we no more pretend to emulate Cato's virtues than we intend to say that, according to Addison's

showing, Cato was a heartless old rascal. The triumph of Roman Whiggism over common human affection in Addison's Cato is very singular, coming from a man like Addison, the gentlest of his race.

Addison lives among us, and will live as long as our language is spoken, by his papers in the 'Tatler' and the 'Spectator.' Praise has been lavished on those works a hundred times before, but the praise grows on what feeds it; no praise can possibly be too high. We have hardly time, before we conclude, to say a word or two about these great English classics, even in the way of categorical description or of analysis. For their origin we said enough for our purpose in our article on Steele; to those who desire fuller information we may mention Tickell, Addisoniana, Adams, Aikin, Johnson, and Macaulay; but it is impossible to understand the man's political status without knowing something of the history of his time. Tickell is naturally the most trustworthy man, as he must have known much which no one else could; but unless some new discoveries are made we come to the sad conclusion that we know all about our gentle friend's social relations, at all events which can be known at present. What Fetter Lane may still do for us we cannot say. We can only say that we have no life of Addison which is in any way satisfactory, or one which does not leave a hundred points on which we should wish for information.

Addison did not originate the school of essayism of which he is the brightest ornament; he did more, he formed it. To the strange dissonances made by such utterly

different men as Steele, Tickell, Budgell, nay, even Pope, Young, and Swift, he gave the key-note in style, and the noisiest birds whistled to his tune; what was best in them he developed, what was worst he discouraged; so that we even find that detestable creature Budgell writing nearly as well at his best as his master and benefactor did at his worst. Steele acknowledges this heartily, and even "the unhappiest man who ever lived," not to mention the most cruel and unscrupulous, Swift, gets nearly pathetic when Addison is angry with him. Even that adder Pope is clearly afraid of him, and shows the manliest part of his nature in trying to prove that he is not so. The man's life was so splendid and pure that he inspired fear; so gentle that he never inspired hatred save in such men as the unhappy Dennis; even Budgell believed in him when he ended his unhappy career by suicide. We have no good biography of Addison; it remains to be written; and it would be extremely valuable, because his is the most perfectly pure and consistent life of which we know. Let us not here question an old story. When Addison was dying, he sent for the wild young Lord Warwick, and said, "See how a Christian can die." We would rather say, study Addison's life, and "see how a Christian can live."

As George Herbert says:

"Only the perfect soul,
Like seasoned timber, never gives;
But when the whole world turns to coal,
Then chiefly lives."

Temple Bar.

PETER COOPER.

BY THE EDITOR.

FEW men have ever become more universally respected and widely beloved in their own lifetime, than the venerable philanthropist whose name is prefixed to this article, and whose picture is presented in our engraving. Born in comparative poverty, deprived in his youth of all the advantages of education, and spending his life in the midst of a community in which the accumulation of wealth is regarded as the noblest aim in life, he has become famous merely by his benefactions to his kind, and was one of the first to set the

example of that kind of munificence for which the rich of America have since become conspicuous. And now in his green and vigorous old age he is passing on to the appointed end of all, conscious alike of work well done, of the good which has followed upon his labors, and of the love and veneration of his fellow-citizens.

PETER COOPER was born in New-York city, February 12, 1791, and is now therefore in his eighty-fourth year. He was the son of a very poor man, and was obliged to assist his father with his early savings. His

family was respectable, for his grandfather on the maternal side had been Mayor of New-York, and served during the Revolution in the Continental army as quartermaster. Patriotism seems to have run in the family, for Peter's father became a lieutenant in the same service. On the declaration of peace, he undertook the manufacture of hats in this city, but met with little success. He was burdened with a large family, and found an efficient assistant in his son Peter. The latter had a desire for education, and hence his father allowed him to attend school half of each day. His regret at so limited an opportunity, and his sympathy with others who may crave an education in vain, gave him that desire to assist this class which has found its development in the free schools of the Cooper Union. With the failure of his father the hat business stopped, and at the age of seventeen he was apprenticed to a coach-maker, with whom he served full time, and at its termination commenced business on his own account. New-York then contained about forty thousand inhabitants, and in one of its cheapest streets could have been seen the sign, "PETER COOPER, Coach and Wagon Maker." He was an expert with edge-tools, and turned out work with such rapidity as to command an abundant patronage. Every thing was then on a small scale—not excepting New-York itself. The city contained but one bank (the Bank of New-York), and its boundaries were Franklin Square and Chatham Square on the east, and City Hall Park on the north. The young coach-maker received the patronage of the gentry, and as soon as he found himself on a safe footing, he began to consider the importance of establishing a system of American manufactures. He went so far as to invent a machine for dressing cloth, and this, during the war with England in 1812, was in large demand. But the return of peace brought a general collapse of business, and the young mechanic, sharing the general misfortune, saw his coach-shop pass into the hands of the sheriff.

In 1815, though still very poor, he got credit enough to open a cabinet-making shop, which required less capital than coach-building. Here, however, he was again unsuccessful, and only saved himself from failure by dextrously changing his business. His name now appeared over a green-grocery, and the future philanthro-

pist was seen weighing sugar, cod-fish, and pork to any one who sought his humble shop. This gave him a humble living, but nothing more. At last he hit on another scheme, which offered better prospects. As a coach-builder and a cabinet-maker, he had noticed the inferior quality of the glue then in use, and he thought he could make a better article.

Having failed in the first three plans of life, he now struck a permanent source of success, and "Cooper's glue" became a staple in the market. The reason of this was that, as a mechanic, he knew just what was wanted, and put forth every exertion to make the required article. Since then his glue and isinglass have become known through the world. At the time referred to the most extensive butcher in this city was Henry Astor, (brother to John Jacob.) He had a large establishment in the Bowery, and accumulated an estate of \$300,000, all of which he bequeathed to his nephew William. Henry Astor's slaughter-house afforded materials for the glue-pot, and Peter Cooper's wagon could be seen there loading up scraps. But times have changed since then. Instead of a solitary kettle, the glue establishment now covers several acres of ground, and employs a regiment of workmen.

As soon as the glue business had become remunerative, Mr. Cooper again applied himself to the improvement of American manufactures, and commenced a smelting furnace at Canton, near Baltimore. He was the first to apply anthracite coal to iron-puddling, and the experiments which resulted in this improvement were carried on in this establishment. The latter was subsequently removed to Trenton, where it has been in successful operation for twenty years. It contained at the time of its completion the largest rolling-mill in America, and here was initiated the use of iron beams for fire-proof buildings. These Trenton works have been greatly enlarged, and include iron mines, blast-furnaces, and water-power, and are owned by a company of which Mr. Cooper is president. His mechanical genius has never been fully developed, simply because a multiplicity of engagements has prevented it, but some idea may be formed of that genius by the fact that the first locomotive made in America was both designed

and built by him, and was operated successfully on the Baltimore and Ohio Railroad.

Throughout life, however, Mr. Cooper's greatest object has been to educate and elevate the working classes of the community. He early became engaged in the direction of the public school system; but feeling that no common schools could supply a technological education, he determined, upwards of fifty years ago, that, if his exertions were successful, he would establish in his native city an institution in which the working classes could obtain that instruction and training for which he, when young and ambitious, sought in vain. Accordingly, on the 29th of April, 1859, he executed and delivered to six trustees a deed in fee-simple for the ground and building commonly known as the Cooper Institute, covering an entire block at the junction of the Third and Fourth Avenues, which had cost him \$630,000, on the condition that "the above mentioned and described premises, together with the appurtenances and the rents, issues, income, and profits thereof, shall be forever devoted to the

improvement and instruction of the inhabitants of the United States in practical science and art." An additional sum of \$10,000 was given to the trustees for procuring the requisite furniture and apparatus.

"Thus," says a writer in *Harper's Weekly*, "was accomplished during his lifetime a purpose formed forty years before by a mechanic working at his bench for his daily bread—a purpose never lost sight of amidst the fluctuations of business, the temptations of political and social position, or the demands of public or private charities, to which his hand had ever been open. One scarcely knows which to admire most, the stern tenacity of his purpose, or the magnificent scale on which it has been executed."

In recognition of his exalted character and many public services, a public birthday reception was given to Mr. Cooper on the 12th of February last by many of his most distinguished fellow-citizens, all of whom joined in expressing their esteem for him.

Though eighty-three years old, Mr. Cooper is still engaged in active business.

LITERARY NOTICES.

PHYSIOLOGY FOR PRACTICAL USE. Edited by James Hinton, with an Introduction by E. L. Youmans. New-York: D. Appleton & Co.

"The present work," says Professor Youmans, in his introduction, "has been prepared entirely with the purpose of making it, in the greatest possible degree, practical and useful. It contains a great deal of accurate and trustworthy physiological science, presented in the most familiar and untechnical style; but all this is subordinate to the useful lessons and conclusions that are enforced in regard to what may be called physiological conduct and practice."

It is scarcely necessary for us to say more than that the execution of the work fully accords with the plan as outlined in the above quotation. It is not in any sense a systematic treatise, and it will carry the student but a little way toward the mastery of theoretical physiology; but it is wonderfully clear, comprehensive, and intelligible in its expositions of those portions of the science which have a direct bearing upon sanitary habits and conditions, and in pointing out how they may be practically applied in the care of the bodily

organs, and the preservation of the general health.

The book consists of a series of detached essays, each of which was prepared by a professional gentleman with an intimate practical knowledge of the special subject of which he treats. These in turn have been submitted to a careful revision by the editor, and by him welded together in such a way as (in spite of some obvious *lacune*) to form a homogeneous whole, sufficiently comprehensive for the object kept in view in its preparation. The first chapters on "The Faculty of Hearing," "The Eye and Sight," "The Sense of Smell," and "The Sense of Taste," are incomparably the best explanation of the function and organism of the senses that we have seen, and should be mastered by every one, at least, who has the care of children. The chapters on "The Brain and its Servants," "Digestion," "The Skin—Corpulence," "The Bath," "Respiration," "Taking Cold," "Pain," "Sleep," "Sleeplessness," "Ventilation," "The Action of Alcohol," "Occupation and Health," "Muscular Motion as exemplified in the Human Body," and "Training and Gymnastics," are not less valuable, and scarcely less important.

Those on "The Liver and its Diseases," "Influenza," and "Headache," would seem to belong rather to a medical work than to a treatise on Physiology, but they serve to illustrate the principles laid down in the other papers, and can hardly fail to prove useful.

An authoritative work applying the principles of physiological science to the conduct of life has long been urgently needed; and the present volume may be recommended to schools and families as meeting this want more perfectly than any other work yet published.

ALCESTIS. Leisure Hour Series. New-York: Henry Holt & Co.

It will be with a feeling of something like gratitude to both author and publisher that the reader will lay down "Alcesteis," especially if duty or inclination have led him to make extensive acquaintance with the good, bad, and indifferent "stories of domestic life" which make up the current literature of fiction. It is not merely that the story narrated is almost idyllic in its simplicity and tenderness, notwithstanding the tragic melancholy of its close, that the character-drawing is firm and finished and true, the style pure and lively, and the descriptions picturesque, vivid, and natural: these would be sufficient to lift it high above the level of the average novel; but its most distinguishing charm is that it transports the reader into a new mental atmosphere, in which the experiences and mishaps of love-making are not assumed to be the only things worth his attention. It is, in fact, a musical novel; and is pervaded throughout with the fine enthusiasm of art.

Alcesteis is the name of an opera composed by a young man, Josquin Dorioz, whose passion for music (inherited from his mother, an artiste) led him to abandon at an early age aristocratic family connections, and whose career as a professional musician forms the groundwork of the story, the scene of which is laid in one of those small German courts of the last century in which music seems to have made her home. Disappointed love and baffled ambition, preying upon a sensitive temperament and frail body, brings Dorioz at last to a condition in which the rejection of his opera by the court-musician, who is his enemy, seems likely to crush out his young life in despair. To avert this if possible, or at least to let him end his days in happiness, Lisa Vaara, his fellow-pupil, who has loved him all her life—and who is one of the loveliest and noblest characters in modern fiction—consents to marry the tyrant whom she hates, and who makes the production of *Alcesteis* the condition of her sacrifice. The opera is performed with brilliant success, and Dorioz, un-

conscious of the bitter price at which his satisfaction was bought, goes away to Italy to die.

We are aware that this outline reads like the commonplace plot of a commonplace story; but the beauty of "Alcesteis" is of the kind that eludes both analysis and description, and baffles the attempt even to indicate it. We can only recommend the novel to our readers—even those who do not usually rank themselves among novel-readers—as one of the best, most artistic, and most thoroughly delightful of recent contributions to fiction.

THE PERIODICAL LITERATURE OF THE UNITED STATES OF AMERICA. With Index and Appendices. By E. Steiger. New-York: E. Steiger.

One of the most important contributions to the American department at the Vienna Exposition of last year was the collection of the periodical literature of America made by Mr. E. Steiger, the enterprising German publisher of this city. This collection embraced specimens of more than six thousand different periodicals from all the States and Territories; and these were arranged in one hundred and nineteen uniform volumes of the size of *Harpers's Weekly*, all papers of a larger size being folded to that form.

Availing himself of the facts obtained in making that collection, Mr. Steiger has now published a complete catalogue of the periodical literature of the United States. This catalogue is a model of arrangement, and contains the name, size, price, and place of publication of no less than 8081 newspapers and magazines. These are first catalogued alphabetically under the several States and Territories; and immediately following is an alphabetically arranged index of subjects treated of or interests represented by the various periodicals. This index comprises more than four hundred headings, and is printed in German, French, Italian, Spanish, and Dutch, as well as in English. Another appendix contains a "Specimen of an Attempt at a Catalogue of Original American Books, with Index of Subject-Matters," which will make every student hope that Mr. Steiger may be induced to make the catalogue complete.

The book, whose full title is prefixed to this notice, is a monument of intelligent and well-directed industry. Only a bibliographer can realize how much painstaking labor must be given to the making of such a compilation; but it is to be hoped that Mr. Steiger's enterprise (which must prove a pecuniary loss to him at best) may meet with a cordial recognition at the hands both of publishers and the public.

HISTORY OF THE INTERNATIONAL. By M. Edmond Villetard. Translated by Susan M. Day. New-Haven: *George H. Richmond & Co.*

A book by a Frenchman usually has the merit of clearness of arrangement, easy manipulation of facts, and vivacity of style. In especial do we look for this when the writer is of such reputation as to have held the position of editor of the *Journal des Debats*; and the theme of such interest as the history of the famous or rather infamous International. But M. Villetard has either been greatly misrepresented by his translator, or his book is not only dull as a narrative but incoherent in statement and singularly crude in style; rising in no respect above the ordinary level of a newspaper chronicle. Moreover it is the indictment of a bitter partisan rather than the calm narrative of a historian; and the meagre and inadequate array of facts which it presents are introduced merely to illustrate and fortify the main, structure of charges, denunciations, inferences, and innuendoes. In fact the book was written in 1871 simply to inflame popular sentiment against the Communists, and against the International as responsible for them and participants in their crimes. It accomplished its object probably; but it in no way merited reproduction in English.

The translation is very slovenly, and the book fairly teems with misprints and typographical errors. The brief Introduction by Prof. Henry M. Day is sensible and interesting; but as a whole the book reflects no credit upon either author, translator, or publishers.

THE GREAT CONVERSERS, AND OTHER ESSAYS. By William Mathews, LL.D. Chicago: *S. C. Griggs & Co.*

These essays, brief and fragmentary though they be, entitle Dr. Mathews to rank among the best of recent essayists. They have a quite peculiar flavor of literature and the library, indicating wide reading and a capacious memory; yet their author is no "bookish idiot," as Pope has it, "with loads of learned lumber in his head," but a man of cultivated intellect, catholic taste, and that mental balance which is called common sense. And the style alone would make the essays worth reading. Nothing more chaste, scholarly, and pleasing than the papers on "The Great Conversers," on "Epigrams," and on "Literary Clubs," has appeared since Leigh Hunt's fragments were published; and the last essay, on "The Waterloo Campaign," shows that the author is as keen in criticism and as terse in historical narrative as he is graceful in linking together his gleanings from many books.

Altogether, we know of no book more likely to stimulate the literary curiosity of younger

readers, or to fill up with satisfaction a few of the by-hours of the more scholarly.

DAVID CROCKETT: His Life and Adventures. By John S. C. Abbott. New-York: *Dodd & Mead.*

It would be premature, perhaps, to affirm that Mr. Abbott is gaining wisdom with his years, but the later volumes of his series of "American Pioneers and Patriots" certainly show an appreciable degree of improvement upon "Daniel Boone." The life of Crockett is very far indeed from a perfect biography or from a perfect biographical sketch; but an adult of a fairly catholic taste can at least read it with something like interest, and without having his attention challenged at every page by the crudeness and flimsiness with which a professional bookmaker sometimes practices his art. There is less moralizing in it than in any of the previous volumes, and what there is is so introduced into the text that one can skip it without the necessity of searching it out very closely; there are fewer digressions and attempts at so-called picturesque description than usual; and a large part of the really entertaining narrative is given in Crockett's own racy language.

One very significant test of the improvement to be observed in this volume is the fact that Mr. Abbott only once makes use of "The Palace of Versailles" as a counterfoil to the rude privations of a frontier life; and does not assure us more than three or four times that man can be just as happy when eating the bread of honest industry or sleeping the sleep of fatigue under the canopy of the silent stars as in the gilded halls of wealth.

FOREIGN LITERARY NOTES.

M. JULES SIMON has brought out a volume, called 'Souvenirs du 4 Septembre, Origine et Chute du Second Empire.'

MISS THACKERAY writes to the *Pall Mall Gazette*, complaining that spurious autographs, purporting to be those of her father, are being largely offered for sale.

"JOHN BULL" understands that Mr. Bentley is in possession of the original autograph MS. of the short stories of Mr. Dickens which appeared in the early numbers of *Bentley's Miscellany*.

MR. FROUDE is about to leave England for a year or two. He starts this month (August) on a tour of inspection, visiting all the English Colonies, beginning with the Cape and ending with Canada.

MR. GEORGE SMITH is preparing a work on Assyrian Discovery in 1873 and 1874, mainly

with reference to the Deluge Tablet and his explorations at Kouyunjik.

It is reported that Prince George of Prussia, under the *nom de plume* of G. Conrad, has written a drama, which is being published by Messrs. Otto Gülker and Co. at Berlin, and will bear the title, *Elfrida von Monte Salerno*.

GENERAL DI CESNOLA is writing an account of the discoveries made by himself and others at Cyprus during the last three years, with a view to elucidating the ancient history of that island.

THE NEW SHAKSPEARE SOCIETY now numbers 401 members. Dr. Ingleby's General Introduction to Part I. of the Society's series of *Shakspeare Allusion Books* is in the press, and the first part of the Society's Transactions, which has been long in type, is nearly ready for issue.

M. BRUGSCH, the well-known Egyptologist, will attend the International Congress of Orientalists, to be shortly held in London, as the representative of the Khedivé, and intends to deliver a lecture on the Exodus, which will be of deep Biblical interest.

MR. ROACH SMITH, F.S.A., etc., is about to issue a new and improved edition of "The Rural Life of Shakespeare, as Illustrated by his Works." A second and enlarged edition is being printed by subscription. Names of subscribers will be received by the author at Temple-place, Strood, Kent.

THE first volume of the new issue of the 'Encyclopædia Britannica' is ready for the press, and may be expected to appear in the course of a few months. More than half the matter contained in the volume is new, the rapid progress of science since the publication of the last edition having made extensive changes and additions necessary. In making these changes, Prof. Baynes has secured the co-operation of some most eminent writers in the various branches of science and art, criticism, and philosophy.

MR. HENRY HUTH (London) has had printed, for private circulation, an interesting book entitled "Prefaces, Dedications, Epistles, selected from Early English Books, 1540-1701." The books from which these extracts are made are, for the most part, exceedingly rare; such as "The Comedy of Acolastus," 1540; Lydgate's, "Troy-Book," 1555; "Beware the Cat," 1584; Greene's "Farewell to Folly," 1591; Peachman's "Minerva Britannia," 1612; Philpot's "Elegies," 1641, etc. Altogether, there are between eighty and ninety volumes from which the prefaces or other preliminary

matter are here printed. The editor is Mr. W. C. Hazlitt.—*Athenæum*.

M. JULES JANIN bequeathed his library to his native town, Saint-Etienne, M^{me}. Janin retaining the use of it during her lifetime. The formation of this library was the work of half a century, comprising, as it does, from six to seven thousand volumes. Beside admirable editions, Aldines, Elzevirs, Robert Estiennes, and some fine copies of the poets of the fifteenth, sixteenth, and seventeenth centuries, it contains copies, on Dutch or Chinese paper, of all the works of importance which have appeared for the last forty years. Authors, knowing the fondness of the celebrated critic for good books, had complimentary copies printed for him, with dedications in prose or in verse. Jules Janin made it a duty and a pleasure to have them richly bound by the most celebrated binders, such as Trautz-Bauzonnet, Duru, Capé, Gayler-Hiron, Petit, etc. Some of these dedications are real manuscript prefaces. Under the cover of most of the volumes is to be found a letter from the author. A copy of *Jocelyn* contains, besides the dedication, four pages of manuscript written by Lamartine. There are some unique copies. The publisher Curmer had printed, solely for Janin, a single copy of a splendid book ornamented with original designs.

'THE BOOK OF THE BUNYAN FESTIVAL' is the title of a work that is being prepared for publication by the Rev. W. H. Wylie, a minister of the Baptist denomination. In addition to the addresses delivered by Dean Stanley, Earl Cowper, and the other orators of the occasion, the volume will contain an historical essay and notes, in which new light is thrown upon various points in the career of Bunyan. The supposition that the Bunyans were gypsies is shown to be groundless; the hamlet of Harrowden, in the parish of Cardington, is put forward in the place of Elstow as being, perhaps, the place of John Bunyan's birth; and reasons are advanced for believing that, as a soldier, Bunyan fought in the ranks of the Parliamentary, and not of the Royalist army. Facts are cited which throw doubt on the supposition that Bishop Barlow ever befriended the tinker-preacher, and tend to prove that it was not he who procured Bunyan's release from gaol. The familiar story of Bunyan's going abroad when he was a prisoner, and coming back of his own accord in time to save the gaoler and himself, is shown to be somewhat dubious. It is certainly remarkable that a precisely similar story is told by John Gratton, a Quaker, of himself, while no such incident

is related by Bunyan. Gratton was confined in Derby gaol in 1683. Mr. Wylie gives, among some new anecdotes, the following. The minister of the old Meeting at Bedford, in which the tinker preached, was lately, of a Scotch tour, introduced to a Highlander in Glenlyon as "the successor of Bunyan." The Celt surveyed the young English preacher from top to toe, and said, "Eh, mon, but you'll find it hard wark to fill *his* shoon."—*Athenæum*.

SCIENCE AND ART.

PHOTOGRAPHING THE SOLAR PROMINENCES.—Dr. Sellack at the Cordoba Observatory has been trying some experiments with a view to getting photographs of the solar prominences without the spectroscope. His idea is to absorb the violet rays of the sun's image by interposing a film of silver iodide, and then to obtain a photograph on iodized collodion, which is only sensitive to the violet and indigo rays. The image will thus be formed by rays belonging to that small portion of the spectrum which can both pass through the silver iodide film, and also act on the sensitized collodion, and in this region lies one of the hydrogen lines emitted by the prominences. The sun's light being thus reduced in the ratio of the above-mentioned small part of the spectrum to its whole length, Dr. Sellack anticipates that the much larger portion of the light of the prominences will be bright enough to stand out against the enfeebled background of scattered sunlight. He has, however, not yet succeeded in obtaining any decisive result.

REVELATIONS OF THE SPECTROSCOPE CONCERNING MOLECULES.—In two papers recently read before the Royal Society Mr. Lockyer continues his researches on the branch of Spectrum Analysis to which he has recently devoted so much attention. When first the spectroscope was applied to the examination of the light emitted by terrestrial elements or by the heavenly bodies, physicists confined their attention to distinguishing the spectra of different substances, but it was soon found that these spectra varied in a wonderful manner under various conditions of temperature and pressure, and a rich field of physical inquiry has thus been opened out. Considering that the lines in the spectrum of any substance represent the modes of vibration of which its molecules are susceptible, or in musical language the notes to which they respond, it is evident that changes in the spectrum must give us much insight into changes of molecular condition, one of the most interesting subjects of inquiry. From his researches on

various spectra, Mr. Lockyer is led to assume five stages of molecular arrangement, proceeding from the simplest form which gives a line spectrum, to the fifth which produces a continuous absorption.

According to this view, the higher the temperature the simpler will be the molecule; and further, solids, liquids and dense vapors have a more complicated molecular constitution than the same elements in a rarefied state. In this theory no account would appear to be taken of the jostling which one molecule suffers from others near it in the case of a dense vapor; in fact, Mr. Lockyer's object appears to be to refer all variations to changes within the molecule. The researches are not yet complete, but Mr. Lockyer has obtained already most important results. Among these may be mentioned his conclusions that the vapor densities of the elements in the sun's atmosphere more closely agree with the older atomic weights (magnesium vapor being lighter than sodium), and that the vapors of different elements are in different molecular conditions at the same temperature.

THE SPECTRA OF STARS.—An important contribution to our knowledge of stellar spectra has been made by Dr. Vogel, of Bothkamp, in a paper in the *Astronomische Nachrichten*. Starting from Secchi's classification of the spectra into four types, he extends and modifies it, and attempts to give some idea of the physical and molecular condition of the stars hitherto examined.

In this new arrangement Secchi's third and fourth types are merged into one, and the three classes are:—

1. White stars at a high temperature, showing very fine absorption lines.
2. Yellow stars (like our sun) at a somewhat lower temperature, exhibiting strong absorption lines of the vapors in their atmosphere.
3. Red stars in which the temperature is so low that combination of the elements in their atmospheres takes place, and compound molecules are formed, which, as Lockyer has shown, give rise to broad absorption bands forming channelled spectra.

The first two classes are further subdivided according as cool hydrogen causes absorption lines, or as these are altogether wanting; or, finally, as incandescent hydrogen exhibits its bright lines on a less bright continuous spectrum. The third class does not admit of this subdivision, but splits up into two sections, in one of which the dark bands are sharply defined on the red side, shading off towards the blue, whilst in the other the reverse is the case. Dr. Vogel has, with the assistance of Dr. Lohse, commenced a systematic spectroscopic survey of all stars down to the 4½ mag-

nitude, from 10° south of the equator to 20° north, and this work is already half finished. It is to be remarked that many of the variable stars have been examined; some of them show bright lines, but in most cases it appears that their increase in brightness is caused by dark absorption lines fading out. We have evidently yet much to learn on this subject, and Dr. Vogel's classification can only be accepted as provisional, but he appears fully justified in fixing on hydrogen as the characteristic of his types.

MORTUARY PROCESS.—Dr. von Steinbeis, a German *savant*, proposes to revive an old method of disposing of the bodies of the dead. The plan is to cover the body with Roman or Portland cement, which hardens into a solid mass, and renders the escape of noxious gases impossible. According to this plan, the corpse would be placed in a sarcophagus of already hardened cement, the cavity in which it reposed would be filled up with the same material, and both would harden together into a thick slab of a substance resembling stone. Thus the deceased buried in this manner would rest within instead of under his tombstone, and grave and monument would be comprised in the same block of imitation granite.

SPONTANEOUS GENERATION.—At the last meeting of the Société de Biologie de Paris, M. Onimus presented an apparatus by means of which he had been able to follow the formation of bacteria without the intervention of germs such as are contained, according to M. Pasteur, in the atmosphere. The apparatus in question consists of a flask with three tubules, in which a vacuum is made by filling it with water, and expelling the whole again by prolonged ebullition. One of the tubules ends in a hollow needle that is buried in the heart of a rabbit, or in the interior of an egg. The flask then sucks up some grammes of blood or of albumen. Air is then allowed to enter after filtration through a thick layer of cotton wool. M. Onimus then finds, after the lapse of a few days, that the liquid in the flask contains molecular granulations, and very soon afterwards vibrios and bacteria.

GOOD NEWS FOR BATHERS.—M. Gosselin has invented a new safety swimming apparatus, which has been tried with successful results in Paris. This ingenious apparatus consists principally of an india-rubber pneumatic tube, which, starting from the top of the chest, passes under the left shoulder, down the spine as far as the loins, and then divides into two branches, which are rolled round and round the thighs as far as the knees. Some smaller tubes are joined on to the tube which

goes down the back, and meet on the chest, following the lines of the ribs. All these tubes are enclosed in a double casing of flannel, which forms a shirt, buttoning in front. An opening at the upper part of the tube, closed by a copper button, serves to inflate the apparatus. This apparatus can be used for bathing, or in case of shipwreck. It is only necessary to open the aperture at the neck, and to blow into it; the loss of gas is said to be so extremely small that one inflation will last a whole day. To render the apparatus more complete for "those who go down to the sea in great ships," M. Gosselin has invented a buoy to accompany the swimming apparatus, which will hold provisions² or valuables.

CHLORINE GAS IN A NEW RELATION.—During the late cholera epidemic in Vienna, a new remedy, called camphorein, was used with great success in the hospitals. It is prepared simply by passing chlorine gas into pure turpentine oil until saturated; it gives a thick, heavy, oily fluid, of brown color, with a strong smell of chlorine. This is freed from muriatic acid by washing with water. The remedy is applied by placing a portion in a flat vessel and holding it to the patient to inhale. The results attending this method of treatment are regarded as indicating that oil of turpentine is the best absorbent of chlorine gas, and that, therefore, it can be employed with advantage in operations and other cases where chlorine is to be evaporated in large quantities.

THE TEMPERATURE OF THE SUN.—*Der Naturforscher*, No. 22, has a paper on this subject, detailing experiments by Father Secchi, comparing the radiating power of the carbon poles of a voltaic battery capable of melting platinum with that of the sun. He found the latter $36\frac{1}{2}$ times as much as the former; and, reckoning the heat of the voltaic arc at 3000° , he concluded that of the sun to be from $133,780^{\circ}$ to $169,980^{\circ}$, according to the allowance made for absorption of solar heat by our atmosphere. The writer, who only gives the initials "R. M.," compares these results with others obtained by various processes, and comments on their excessive disagreements. Thus, Deville made the solar temperature 2500° to 2800° , and Secchi in former experiments $5,801,846^{\circ}$, and Zöllner $61,350^{\circ}$. Evidently the subject requires a careful examination of the probable value of the various methods by which the discordant results were obtained.

THE AMERICAN AND EUROPEAN METHODS OF PHOTOGRAPHING THE TRANSIT.—Some attention has recently been directed to the

question of the relative advantages presented by the two methods of photographing the transit of Venus adopted respectively by the American and by the European observers. The managers of the American scheme of observations consider that the method which has so long been adopted at Kew, however excellent for securing beautiful sun-pictures, is not trustworthy enough for recording so delicate a phenomenon as the transit of Venus. In the Kew method the focal image is optically enlarged, and although the amount of enlargement—that is, the scale of the sun-pictures—is theoretically calculable, practical difficulties are involved which render the scale so determined not strictly reliable. Accordingly, the best estimate of scale, when this method is employed, may be regarded as derived from the picture itself, that is, from the measurement of the photographic disc. Inasmuch, however, as this disc is enlarged by photographic irradiation, it is manifest that an element of uncertainty is introduced, the amount of irradiation being variable under varying conditions. In the American method the focal image is used to give the photographic picture, and thus the scale of the picture is known at once, since it depends merely on the focal length of the object-glass. The centre of the photographic solar disc is determinable with great accuracy, no matter how great or how small the extent of photographic irradiation may be; so, also, the centre of the disc of Venus is accurately determinable, and hence in this method the distance of Venus from the sun's centre can be determined independently of the photographic peculiarities of the picture. The American astronomers maintain that their method is very much more trustworthy than the other, and their opinion would appear to be confirmed by the experiments on photographic irradiation which led Lord Lindsay to adopt Professor Winlock's method in preference to Dr. De la Rue's.—*Popular Science Review* (London).

ENGLISH OBSERVERS OF THE TRANSIT OF VENUS.—Most of the parties appointed to observe the transit of Venus are now on the way to their destination, and all hope to make their preparations and be ready to take note of the important phenomenon on the critical day—December 8th. Three of the parties will be stationed in the Sandwich Islands, one in New Zealand, one in Rodriguez—a small island in the Indian Ocean near Mauritius—and two in Kerguelen Island, a miserable spot far to the south of the Cape of Good Hope. Each party is provided with wooden huts, to be used as temporary observatories, with all the clocks, telescopes, and other

instruments, including forty-six chronometers required for the observations, and with apparatus for taking photographs of the transit in all its stages. Instructions for their guidance have been drawn up by the astronomer-royal; and considering that all the observers have been under training at Greenwich Observatory for some months, their skill and capability should be equal to the occasion. Part of their training has consisted in a rehearsal of the transit with a model invented by Sir George Airy. This model represented the actual transit: the observer looking through a telescope saw the small dark disc of Venus approaching the edge of the sun, moving nearer and nearer, and at last (apparently) coming into contact. This was repeated day after day for months, till every man was familiar beforehand with the phenomenon as it will actually appear; for the essential point of the observation is to note exactly the moment of contact. On the accuracy with which that is determined depends, for the most part, the value of the results; but with well-trained observers, and the best of astronomical appliances, we may believe that the coming transit will be observed as transit was never observed before. Simultaneously with the English operations in the south, the Russians will take observations in Siberia and other parts of the north, and the two sets of observations will afterwards be employed in working out the conclusion with a degree of accuracy which would not otherwise be possible.

At the recommendation of the Royal Society, the government have sanctioned the appointment of four naturalists to accompany the expeditions. One will collect plants in Kerguelen, with a view to enlarge and complete our knowledge of the botany of that remote island; the other three are to explore Rodriguez, devoting themselves respectively to the botany, the geology, and the fossil remains of that little territory. It is known that Rodriguez was in former ages the dwelling-place of very remarkable animals, and if their relics can be discovered, there will be great gain for palæontological science. The cost, as we have stated above, will be borne by the government, in addition to the outlay for all the transit expeditions, besides which the *Challenger* is still pursuing her voyage of exploration around the globe.—*Chambers's Journal*.

ASTRONOMICAL OBSERVATIONS IN THE SOUTHERN HEMISPHERE.—Professor Ellery, Director of the Melbourne Observatory, is employing the great reflecting telescope, constructed at the cost of the colonial government, in a survey of the stars and other cele-

tial phenomena of the southern hemisphere. In the course of this interesting work, he has discovered 'that some of the large nebulae, especially of Argus, are undergoing very marked and rapid changes.' These changes are carefully noted, in the hope that further knowledge of the structure of nebulae, and of their cosmical relations, may be obtained. Another branch of work is observation of auroræ and of magnetic disturbances; and on comparing the results with observations in Europe, it appears that whenever an aurora or a magnetic disturbance occurs in the south, similar phenomena are observed in our hemisphere. It often happens that the aurora and the magnetic disturbance occur at the same time in the south, but that only one of the two phenomena is seen in the north; and the contrary. These facts are valuable in themselves, and as showing how science may benefit by combined observations in places at opposite ends of the earth.

NEW MOTIVE POWER FOR SHIPS.—The suggestion has been made, that instead of employing wind, which is always uncertain, to move a ship, it would be more advantageous to employ wind-power, as represented by wave-motion. It is very rare that the ocean is perfectly calm; and as the waves are there, it is proposed to build a ship with an apparatus poised in its interior, so as to move freely in all directions, and with each movement to compress and force air into a chamber, where it would be available for the propulsion of the ship and for other purposes. The supply of power would be greatest when most needed for the more the vessel pitches and rolls, the more air would be compressed in the reservoir. It is argued, that this compromise between sail and steam power would reduce considerably the cost of heavy and expensive rigging—that it would be available even in contrary winds—that while sail-power employs surface to catch the force, this employs mass—and that it could be applied to pumping, to ventilation, to reduction of temperature, as well as to propulsion. And last, it would render unnecessary the cumbrous and costly use of fuel in the working of ships which at present prevails, and employ instead thereof the never-failing power provided by nature, in the ceaseless waves of the ocean.

VARIETIES.

HEBREW LADIES AT THEIR TOILET.—The first thing that would have struck us in examining the garde-robe of a Hebrew lady, would have been the quantity of dresses. In this great age of simplicity such a thing would naturally

astonish us. Hebrew women were, indeed, fond of dress, and the luxury amongst them manifested in the richness and variety of dresses, and the quantity of ornaments and jewelry, was soon carried to such an extent that it became necessary to protest against it. There is no doubt that as the intercourse between the Jewish and other nations increased the ladies felt no longer satisfied with primitive simplicity. The fashions of the clever Egyptians, the elegant Phœnicians, and the luxurious Persians, were soon eagerly sought after and reproduced. Even patient Job got impatient at the dresses, and all of us have read that magnificent, bold denunciation of Isaiah, as with withering sarcasm he denounces the "women of the period" living for nothing else but dress and flirtation, and having but one desire, "to see and to be seen." Now, look first at the under garment: Ketonet tunica. It was worn by men and women, but, of course, women had things made of the very best material. It was made of wool or linen, white or blue, now and then striped—and afterwards—thanks to the Persians—of a silky material. It was worn on the naked body, and a person wearing it is often described as naked, which, in the language of the nineteenth century, means that she was "*en négligé*." The Eastern dresses are all very far from being close fits, and the Ketonet was at first a loose garment, without sleeves, reaching down to the knees. But the Ketonet became gradually tighter. The Persians, who were the dandies of the old world, wore them of considerable length, but not every one could afford this additional expense. It is supposed that the poor wore no other dress except the Ketonet. The second article to be found in the garde-robe of wealthy people was the *sadijn*, translated fine linen in our version of the third chapter of Isaiah. I suppose that it was worn over the Ketonet. In the fourteenth chapter of the book of Judges the same Hebrew word is translated differently. Thirdly, some ladies wore a second under-garment, a long wide tunica, with or without arms, known amongst the Greeks and Romans, and worn also by the Phœnicians. It was made of costly material, and richly inwoven with flowers and figures. The part around the neck was covered with ornaments, the flowers were generally of the darkest purple, and the borders were trimmed with gold and brilliant colors. Next came the girdle to keep up the dress, so much thought of amongst all the nations of antiquity, as I need hardly remind the readers of Homer. It was made of different materials, according to the taste, or rather the purse, of the owner. The common girdles were of leather, and very narrow. Some were of silk or gold, and ornamented with

silver buckles; they were worn round the loins: women wore them lower and more loosely than men. Small bottles with scent were often fastened to the girdle, and sometimes also an elegant pocket, in which money or things of value were kept. The last piece of clothing I shall mention is the upper garment, a long wide mantle with a train that would delight our Western ladies. It seems to have been originally a square piece of cloth, somewhat like a big shawl. At first it was made of camel's hair, afterwards it was made of cotton. Those worn in the summer were of a light material, like our muslin, whilst for those in use during the winter a thicker material was generally chosen. The *simlah* was useful and ornamental. It was often used as a carpet or as a covering during the night. Hence the law of Moses, which regulated several things—for instance, that no mixture of cotton and wool should be used in the making [of materials—commanded that if a man through poverty pledged his mantle it should be restored to him after sunset. The *simlah* was fastened with golden pins to the shoulders, whence it fell in graceful folds over the other garments. Some of the mantles must have been splendid: as I said before, the *garde-robe* of a Hebrew lady was well filled. In the book of Judges the then living girls are thus described by Deborah, "a prey of divers colors, a prey of divers colors of needlework." "Her clothing is silk and purple," says Lemuel. The Phœnicians excelled in weaving and dyeing, and were well noted for their dark blue and their purple. The Persians were noted for their silk. There is no doubt that the Hebrew ladies owed to them some of their most magnificent dresses.—*Saint Paul's*.

MONKEYS.—There are people who like monkeys. They it is who must be the true link between us and monkeys, just as monkeys make the link between them and the lower animals. In my opinion one must be, as it were, a semi-simian to endure the society or even the sight of monkeys. I have, as I have said, no sympathy whatever with them; my dignity will not admit of it. I feel as a staid Castilian might feel in company with a low comedian from the Palais Royal. Their grimaces make me uncomfortable, their half-humanity shocks me, their hideous community of feature with some of my dearest friends is horrible to me. A party of my fellow-creatures staring, with faces expressive of various stages of idiotic delight, at the antics of the caged monkeys in the Zoological Gardens, is to me a pitiful and a painful spectacle; it is enough to persuade a man of the truth of Darwinism. Mr. Gladstone, who, not

long ago, deplored the fact that his special duties gave him no leisure to read Darwin and Wallace, and to make up his mind upon the doctrine of evolution, might perhaps now find time to spend an hour in front of the monkey-house in the Zoological Gardens. He would, I am sure, come away a strong believer in this fashionable doctrine. Yet monkeys have many pleasing qualities; some of the species are very gentle, and capable of considerable affection towards human beings. There is, however, that about monkeys, in this country at least, which should effectually stand in the way of their becoming pets. They have almost always, every one of them, the seeds of a fatal consumption, their lives are nearly always to be measured by a few months, and their antics are none the fewer that they are racked every now and then by a dry hectic cough. Their ill health depresses them, but nothing can deprive them of their love of mischief, and this contrast of buffoonery and depression is one reason why a tame monkey makes one of the most melancholy of pets. They are ghastly humorists, they are drolls in season and out, their gaiety is like that ascribed to the Chinese, who laugh to see the executioner flog or behead a criminal. A monkey's humor is of a kind that I could never enter into. It is founded on the doing of mischief. Let the man who does not believe me watch a monkey playing with puppies or kittens, and compare their innocent playfulness with the cruel tricks the monkey will put upon them. My own monkey pined away, and in two months after he came to me, do what I would, was in the last stage of consumption. It was cold, shivery, winter weather. He crouched near the fire, feeble and exhausted, looking at me, as sick animals will do, with reproachful eyes, as if I was responsible for his sufferings; but almost to the last he would do mischief, pulling a burning coal on to the hearth-rug, or upsetting a cup of tea if it stood within reach of him. Notwithstanding his wickedness he was affectionate. And I was getting reconciled to him when he died.—*New Quarterly Magazine*.

AN EDINBURGH REVIEWER ON BROUGHAM COCKBURN, AND JEFFREY.—The truth seems to be that the two men were singularly congenial. They were old familiars, but they were not friends. Brougham's rough arrogance and boisterous power was distasteful to Cockburn's finer sensibilities. His paragon was Jeffrey; and over Jeffrey Brougham lorded it with a certain supercilious arrogance which was, not unnaturally, offensive. But, however much it may be the fashion to decry the uprightness of that extraordinary man, it is not in these pages that hard measure should

be dealt him. On his strong shoulders devolved in the earlier days of this Review much of the labor, and to them was due much of the power and popularity of our efforts. He was a man of strong feeling, and judged intensely of others. He would act and speak with so much vehemence on some prejudice or unfounded surmise as to lead to the appearance, and sometimes the reality, of unfriendliness to his friends. There was in his mercurial temperament a certain restless instability which seemed inseparable from his character, and from all which he did. But where we think that justice has not been rendered him by his later critics is in the unquestionable kindness of his disposition, the honesty, fervor, and breadth of his views, the noble ambition which he cherished, and the ardent love for his country which he did so much to serve and improve. When we read these reflections on him, we cannot forget that they refer to one who for many years did more to raise the intellectual level of his countrymen than all our other public men united. Earnestness and enthusiasm are not qualities so common that we can afford to slight or sneer at them when developed in so large and brilliant a manner as they were in the career of Henry Brougham. He had his littlenesses, and we may lament them; but who in some degree has them not, and where again shall we find them combined with such unmatched power, versatility, and energy?—*Edinburgh Review*.

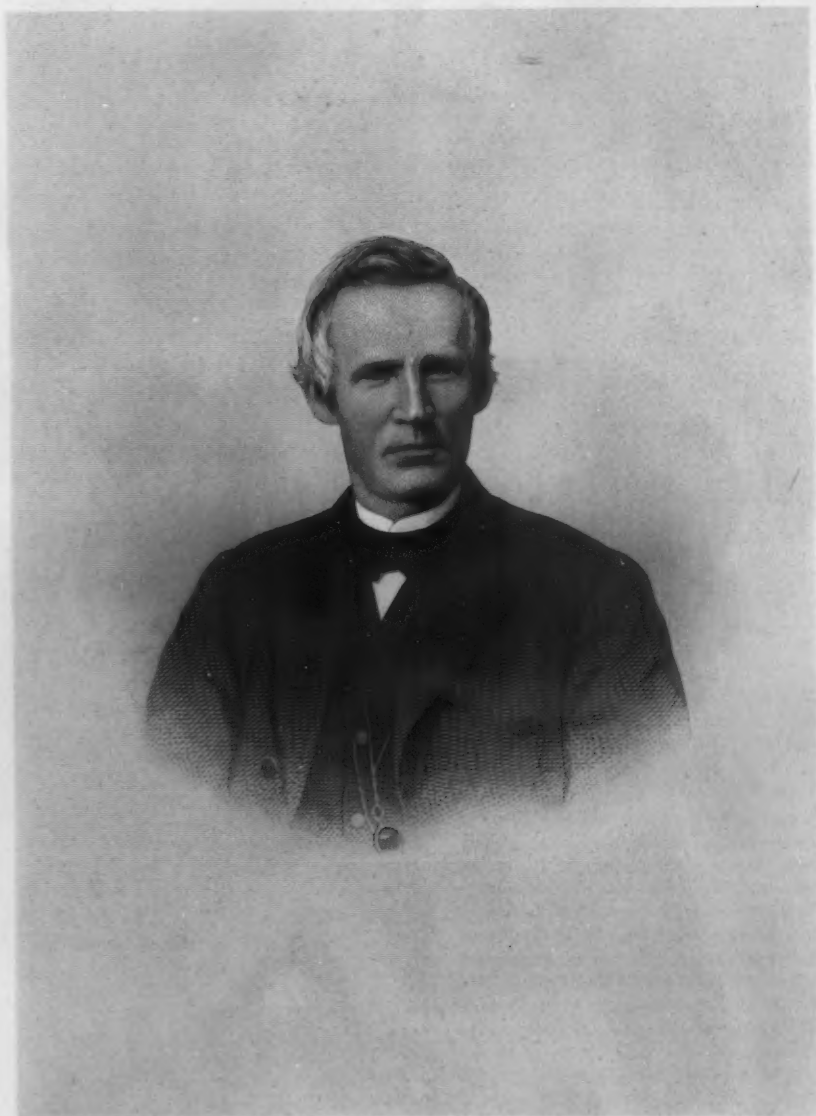
VENICE.—Venice has no poet! She has been celebrated by strangers, but never in her own musical tongue by a son of her own. All the great songs of Italy have come from other regions; not only the "Divine Comedy," which would be out of place among those gleaming watery ways, but even the lighter-storied strains of the "Decameron," the love-sonnets which would have chimed so sweetly to the measure of the waves. Music is everywhere about, but articulate verse nowhere. "Ah oui, tous les Fenitians chantent," says in bad French, and with a certain Teutonic contempt, the German waiting-maid, sniffing disdainfully with broad Teutonic nose at the soft harmonies that rise from the floating choir in the gondola outside the window. All Venetians sing; and no doubt there are humble popular poets here as elsewhere in Italy—a hundred nameless song-makers, who supply the wants of the people; but no voice great enough to have been heard beyond the lagoons has risen out of Venice proper, except in tones of state-craft and diplomacy—in roar of cannon, or in the painter's still language, the poetry of Art. Even kind old Goldoni, with his lively dramas, is a Chiozzote; and

our own Byron is the greatest poetical recollection which one hears of along the noble poetic course of that canal-highway, every house of which, reflected with all its lights in the dancing water, is of itself a poem.—*Blackwood's Magazine*.

OBITUARY NOTICES IN PORTUGAL.—Perhaps the most singular of the contents of the Portuguese newspapers are the obituary notices. Written in a style so exquisitely pompous and stilted as to make the foreign reader incline at first to think them ironical, these long eulogies on the dead are paid for as advertisements, and are generally signed with the name of one of the relatives of the deceased person. A few extracts will suffice to show how false emotion and a false style can desecrate feelings which it is only commonly decent to hold back from observation:—"It is now seventy-two hours since the pious Mr. A. B. ceased to exist! It is now seventy-two hours since the most severe affliction has stricken the hearts of his bereaved relations in their most tender fibres! It is now seventy-two hours since he died, in the summer of his life, as also, in the height and summer of his virtues. It is now seventy-two hours since this great man, great in his intelligence and in his practice of all the Christian virtues. . . ." and so on, through a long list of paragraphs, beginning with the same minute chronological calculation, and all full of the same rhetorical foolishness. The deceased gentleman, if I recollect rightly, had kept a cigar shop in Lisbon. Another similar and very curious development of Portuguese journalism is the insertion of paid eulogies of literary productions. I use the expression "curious" only because the payment is avowed and open, being honestly signed with the name of the friendly critic, and placed in a column set apart for advertisements. It is impossible altogether to disapprove of this practice. It is odd that it has not yet occurred to Portuguese critics to enhance the value of their approval by occasional dispraise. I never saw an unfriendly critique in a Portuguese journal.—"*Notes of Travel in Portugal*," in *New Quarterly Magazine*.

SUMMER NOON.

'Tis mid-day, burning mid-day in mid June;
No breeze in all the realms of air hath birth,
And, stupefied, the scarcely breathing Noon
Lies heavy, heavy on the heat-drugged earth.
Cows seek the shed's, the birds the woodland's, shade;
And lazily with every living thing
Goes the hot hour that parches bough and blade,
Save with the insect sporting on the wing.
Blue through the heat, the far-off mountains show,
Should'ring their peaks, away o'er heath and fen,
Far up the eastern sky. The fierce sun-glow
Strikes to the heart of things; while now and then
Gushes of odor from the south go by,
Borne on light airs that neither live nor die.



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